The Early Iron Age socketed axes in Britain

Volume 1

By

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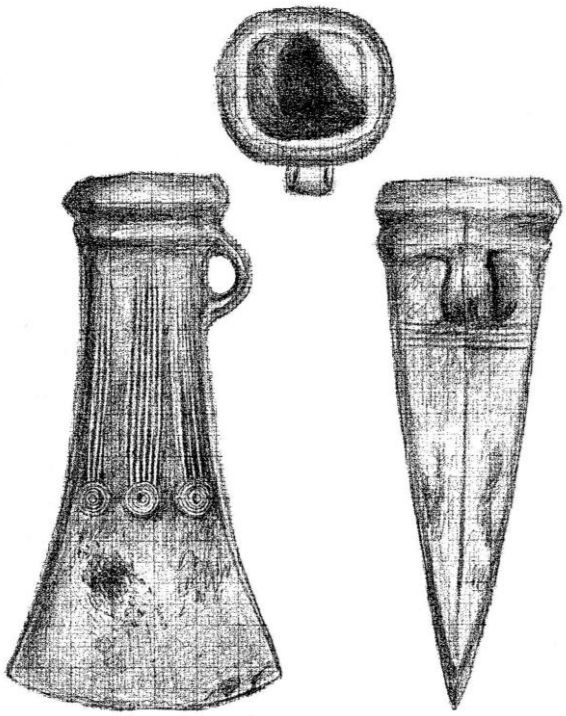
A thesis submitted in partial fulfilment for the requirements of the degree of

Doctor of Philosophy at the University of Central Lancashire

July 2015



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Abstract

This thesis examines metalwork deposition, distribution and association in the British Early Iron Age (800-600BC) through the medium of the socketed axe. Out of 1412 known Early Iron Age axes, 954 specimens were analysed in detail for this thesis: 680 associated finds and 274 single finds. The methodology was governed by two main objectives: firstly, to propose a reworked and more comprehensive typology of Early Iron Age cast copper-alloy and wrought iron socketed axes in conjunction with their metallurgy, distribution and deposition, and secondly, to discuss their place within Early Iron Age society and what part they may have played in the people's life, work, trade and exchange, ritual and death. As a result, this thesis introduces, defines and discusses 12 new types of transitional and Early Iron Age socketed axes. While the transitional type can be dated to the Late Bronze Age-Early Iron Age transition (c. 850-750BC), the remaining 11 types can be dated to the fully developed Early Iron Age (800-600BC). The 11 types of bronze Early Iron Age socketed axes display a great variety of decoration, shape, size, weight and colour. While Late Bronze Age axes are plain or simply ribbed, almost all Early Iron Age socketed axes are decorated with ribs-and-pellets, ribs-and-circlets or a more elaborate version thereof. Some axe have a shiny silver surface colour (Portland, Blandford, East Rudham and Hindon types). More than three quarters of Early Iron Age socketed axes were found in association with other metalwork. These hoards can be divided into two main groups: axe hoards and mixed hoards.

The eight geographical regions outlined in this thesis are defined by different contexts, associations and the predominance of different Early Iron Age axe types, and in terms of depositional contexts this research suggests that the depositional contexts of Early Iron Age hoards containing socketed axes was different from the deposition of single finds: while hoards were often found in retrievable places, single finds were not. The survival of a large number of complete and almost undamaged bronze axes suggests that in the British Early Iron Age socketed axes were not just commonplace tools that were in use until they reached the end of their life. The changes in looks and shape, and consequently the adaption of a new and improved typology of socketed axes in the British Early Iron Age were accompanied by a change in conceptualisation and the overall meaning of socketed axes.

Even when used in a different context their basic, very recognisable socketed-axe-shape was *always* maintained, that is a wedge of different dimensions with a socket and a small side loop for suspension or possible attachment of other items of metalwork. Throughout British prehistory axes were one of the most familiar objects in daily use: as a tool, socketed axes were omnipresent and thus an established part of British Late Bronze Age life – a life that appeared to be foremost practical rather than ritual, with the majority of Late Bronze Age socketed axes showing clear signs of use and resharpening. In the Early Iron Age socketed axes adopted a previously unseen duality in function and meaning (that is materialistic and symbolic). Thus, while Late Bronze Age axe may have been regarded as common woodworking tool, types of Early Iron Age axes were understood as ingots, weapons, or objects needed for certain displays or performances, with their unique ornaments communicating their role in both display and society as well as perhaps their users regional identity and status.

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Acknowledgements

The gathering of material for this thesis started in 2003 and took about two years, but between the sighting and studying of material and the start of the final write-up lay five years in which I started a new job, moved house three times, got married and had two children. My research moved with me but sadly, remained mostly forgotten and unfinished.

As Finds Liaison Officer for Lancashire and Cumbria I developed ties to the University of Central Lancashire, teaching and lecturing there occasionally since 2006; I would have never thought that one day I would enrol there as a student. However, I am very grateful to my – then – colleagues at the University of Central Lancashire for allowing me to join their body of research students and continue my studies into Early Iron Age metalwork.
This thesis is the result of four years of research under the supervision of Drs Duncan Sayer and Vicki Cummings. As my main director of studies, Duncan very patiently saw me through a number of crises in relation to axes and axe hoards, but his words of advice proved invaluable. Duncan helped me develop my thoughts and rarely got tired of discussing axes. He made me read and look into research I would have never thought I would look into. I felt I learned a great deal and I am grateful that both Vicki and Duncan saw me through the last four years without much complaint! Thank you so much for this.

However, my first and most heart-felt thanks must go to my husband Fraser and a friend, Dr Linda Kvist, with whom I shared many lengthy discussions about the unfinished research and who encouraged me to 'just get it done'. I would also like to thank my children Eddie and Hannah, who put up with axes for most if not all of their young lives.
Furthermore, I am sure that, if I had told my mother what I was planning on doing (she still does not know) and if my father was still alive, they would have supported me, too. I kept this research from them – and most other people – for personal reasons.

Between 2001-2005 I visited many museums and I have met many curators and owners of Late Bronze Age and Early Iron Age metalwork who very kindly granted me access to their private or public collections. My special thanks goes to:
Stuart Needham and Ben Roberts (British Museum), Adam Gwilt (National Museum & Galleries of Wales) and Trevor Cowie (National Museum of Antiquities of Scotland) for giving me access to their museums' vast collections

of Late Bronze/Early Iron Age metalwork and especially Adam Gwilt, who allowed me to keep the fabulous Llyn Fawr bronzes off display for an additional Tuesday, when actually they should have been back on display for everyone to see (I quite enjoyed putting out the small 'taken off display for research' labels, though!).
Colin Pendleton† and Chris Mycock for letting me research the collection at Moyse's Hall (Bury St Edmunds) and the unpublished Late Bronze Age hoards stored at Suffolk Archaeological Unit.
Eugène Warmenbol and Jacques Merte for giving me access to the museum collections at Han-sur-Lesse, Antwerpen, Namur and Bruxelles and Alix Hänsel for letting me look at the one sword from Culloden Moor in the collections at the Museum für Vor- und Frühgeschichte (Berlin).
Jay Butler for his comments and support – I would like to think that he would enjoy reading about British Early Iron Age socketed axes!
Robert Entwhistle and Peta Cook (Suffolk County Museum, Ipswich) and Alan West, John Davies and Tim Pestell (Norwich Castle Museum), as well as Paul Robinson (Devizes Museum), Martin Wright (Salisbury Museum), David Allen (Andover Museum), Andrew Sherratt† (Ashmolean Museum), Gail Boyle (Bristol Museum and Art Gallery), Anne Taylor (University of Cambridge Museum of Archaeology and Anthropology), Heather Dowler (Lancaster City Museum), Tim Padley (Tullie House Museum & Art Gallery Trust) and Sabine Skae (Dock Museum).

The following colleagues from the Portable Antiquities Scheme have been very helpful in supplying me with information about new finds of socketed axes and Early Iron Age hoards, especially Katie Hinds (then Norfolk, now (via Wiltshire) Hampshire), Faye Minter (Suffolk), Kurt Adams (Avon and Gloucestershire), Mark Lodwick (Wales), Frank Basford (Isle of Wight), Julie Cassidy (Northamptonshire), Wendy Scott (Leicestershire), Becky Griffiths (North and East Yorkshire) and Andrew Richardson (Kent).

I also owe a huge debt to a small number of people who own socketed axes and Early Iron Age hoards and very generously gave me access to their private collections, in one case at their own house: Eric Penser who owns the fantastic Tower Hill hoard (Oxfordshire), Robert Battersby who owns the equally wonderful East Rudham hoard (Norfolk) and the brothers Dr John and David Parker, each of whom owns one axe of the Skelmore Heads hoard (Cumbria) and very kindly let me study them for my research.

I would also like to thank a small number of friends who knew about this and supported me throughout my research: Justine Biddle, Sam Rowe and Kate Haywood. Justine and Sam – your turn now!

CHAPTER 1

EARLY IRON AGE SOCKETED AXES IN BRITAIN: INTRODUCTION

1.1 Introduction

This study examines typology, depositional contexts, association, metallurgy and regional distribution of Early Iron Age socketed axes, both bronze and iron. The catalogue comprises 1408 specimens (associated and unassociated finds), both antiquarian and modern finds, including very recent discoveries made by metal detectorists and reported via the Portable Antiquities Scheme.

1.2. Aims of the project

This project's aims are threefold:

1. Present a detailed and suitable typology of British Early Iron Age socketed axes
2. Investigate region-specific object associations in Early Iron Age hoards with socketed axes
3. Discuss hoard contexts and look at the depositional behaviour of Early Iron Age people in the different regions of Britain

1.3. Socketed axes

Looking at the entire corpus of Early Iron Age metalwork dating from c. 800-600BC, the predominant artefact type is without doubt the socketed axe. This predominance of axes directly links Early Iron Age hoards to Late Bronze Age hoards from Wales, Eastern and South Eastern England where a prevalence of socketed axes has been recorded in hoards such as from Manor Farm (Wymington, Bedforshire), Somerleyton, Bramford (both Suffolk), Beeston Regis, Aylsham (both Norfolk) and St Mellons (Vale of Glamorgan) (Pendleton 1999; 30; O'Connor 2007a, 64; Turner 2010, 61; Roberts *et al* 2015). This dominance of socketed axes makes them the ideal focus for a study of the Earliest Iron Age in Britain: furthermore, they are the only artefact type that

occurs in all parts of Britain and they were found unassociated as well as in association with other metalwork.

Socketed axes are the only copper-alloy objects which are predominantly found in association with early iron objects. However, the iron versions were always discovered singly, either within or near known settlement sites or in wet contexts, for example no. 665 (Sheepen Farm, Essex), nos. 674+678 (from the Thames) and no. 1403 (Traprain Law, East Lothian) (Rainbow 1928; Manning and Saunders 1972) (see Appendix).

Compared with the number of other metal artefacts this corpus of 1408 socketed axes must be regarded as substantial and exceptional within the field of British Early Iron Age object studies. Other Early Iron Age artefact types such as swords, spearheads, sickles or cauldrons were never deposited in large numbers in one-artefact-type hoards like socketed axes were, for example nos. 226-598 (Langton Matravers, Dorset) and nos. 845-886 (East Rudham, Norfolk).

Even though most Early Iron Age socketed axes were found in hoards, 273 of 1408 specimens were found unassociated with any other metalwork, ceramic, stone or bone and are thus classed as ‘single finds’ or ‘unassociated finds’. 1135 socketed axes came from hoard contexts. This means that Early Iron Age socketed axes from hoard contexts outnumber single finds by more than 4:1 (fig. 1.1.).

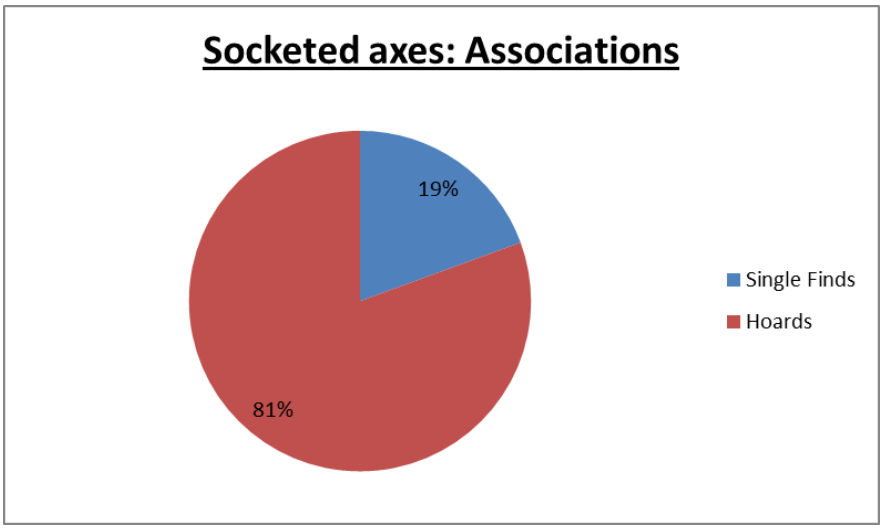


Figure 1.1: Comparative analysis of single finds and hoards containing socketed axes (N=1408)

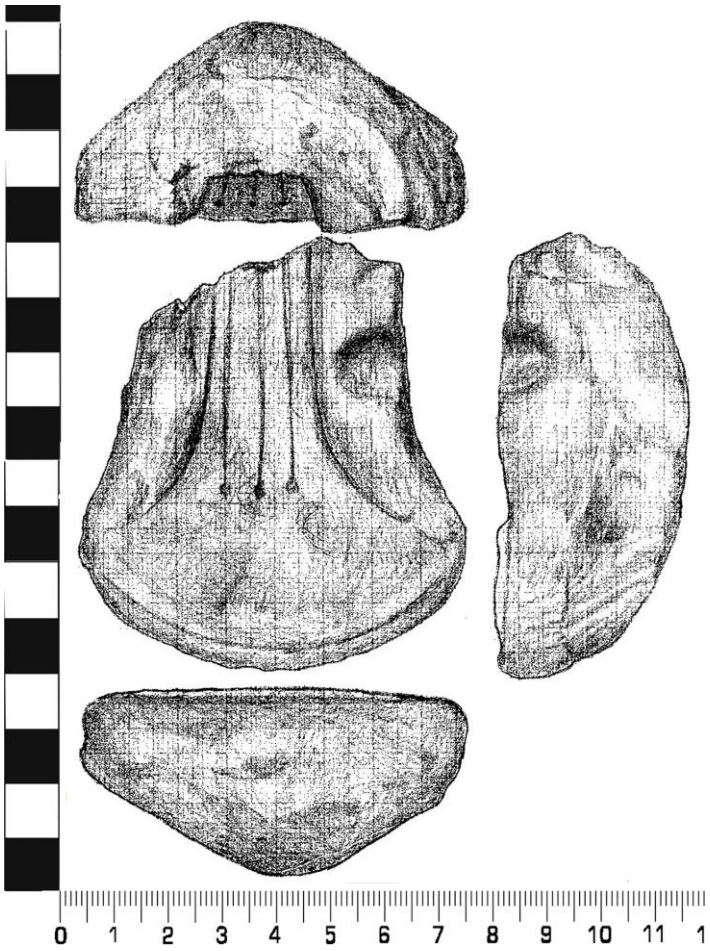


Figure 1.2: Fragment of a ceramic mould for socketed axes from Little Dunagoil (Bute, no. 1253)

Of those 1408 specimens, 1389 were made from cast copper-alloy, one from lead-alloy (Mam Tor, Derbyshire, no. 1398) and 24 were made from wrought iron. The final number of 1403 socketed axes excludes five moulds: three were made from steatite or soapstone that is no. 640 (Melcombe Horsey, Dorset), no. 1251 (Ardrossan, Ayrshire), no. 1280 (Rosskeen, Ross and Cromarty) and no. 1408 (Ham Hill, Somerset). One mould was made from ceramic: no. 1253 from Little Dunagoil (Isle of Bute, fig. 1.2). Only the two moulds from Rosskeen and Ardrossan were complete, meaning that both halves survive.

The small corpus of wrought iron axes, the lead-alloy axe and the moulds were single finds, mostly from settlement contexts. Only copper-alloy socketed axes were found in association with other artefacts.

1.4. Size, shape and decoration

Early Iron Age socketed axes differ from the corpus of Late Bronze Age socketed axes on the basis of their individual size, shape and decoration (Burgess 1971, 267-8). They are either much larger or much smaller than the average Late Bronze Age socketed axe; furthermore, they are either much heavier or much lighter. Their morphology, metallurgy and surface finish had changed drastically during the Late Bronze Age- Early Iron Age transition period

(c. 800-750BC; Needham *et al* 1997), but few studies have acknowledged and attempted an interpretation of these changes (Roberts *et al* 2015).

Past research into socketed axes largely looked at their typology, distribution and dating – but none of them in great detail (Burgess 1971; O'Connor 1980; Schmidt and Burgess 1981; O'Connor 2007a). These studies either looked at Early Iron Age socketed axes in conjunction with contemporary Early Iron Age metalwork (O'Connor 1980; O'Connor 2007a) or on a very limited regional scale (Burgess 1971; Schmidt and Burgess 1981).

This research will examine size, shape and decoration of all British Early Iron Age socketed axes and suggest reasons for the drastic changes from the large homogenous corpus of Late Bronze Age socketed axes.

1.5. Contexts

Well-dated contexts are virtually unknown and the dating of the axes has mainly been performed using typological analysis extrapolated from the few well-associated hoards and by comparisons with artefacts from Britain and continental Europe. Very few of the axes were found with remains of a haft still inside the socket and there are no radiocarbon dates available for any of the axes.

Figure 1.3: The Danebury Hoard (Hampshire, nos. 686-689)

We have sufficient contextual evidence from 252 single finds and 52 hoards to suggest that metalwork was very rarely deposited within a settlement context even though there are examples of hoards deposited very close to known Late Bronze Age/Early Iron Age settlements, for example Danebury (Hampshire, nos. 686-

689), Salisbury (Wiltshire, nos. 1061-1202) and Langton Matravers (Dorset, nos. 226-598). There are no known British Early Iron Age graves, but some of the socketed axes were deposited not far away from ancient monuments such as the hoards from Tillicoultry (Clackmannanshire, nos. 1254-1255) and Sompting (West Sussex, nos. 1009-1025). Chapters 7 and 10 will look at this contextual evidence in detail.

1.6. Thesis structure

This thesis comprises of eight chapters. The first five chapters (1-5) introduce the data and the research and ways of dealing with a large amount of archaeological material, while the second part of the thesis (Chapters 6-8) discusses the findings and presents the results.

Chapters 2 and 3 review the older literature and more recent publications: while Chapter 2 provides a more general background and an introduction to Early Iron Age studies in Britain and on the Continent, Chapter 3 gives a brief overview of past research into typology, metallurgy and interpretation of British Early Iron Age socketed axes. The Continental background is significant to include because it provides the backdrop for a number of finds that are associated with socketed axes in British Early Iron Age hoards.

Chapter 4 outlines the methodology that was used to compile and research the axes listed in the catalogue while Chapter 5 presents the results of the typological study, discussing each Early Iron Age socketed axe type in turn. Chapter 6 discusses the different contexts that the axes were discovered in and associations with other metalwork types within the Early Iron Age hoards. The results of Chapters 5 and 6 are reviewed in Chapter 7 which looks at the socketed axes from each British region individually. Herein, typological distributions and regional preference for certain locations are discussed.

The final chapter reviews the initial research questions and the aim of the thesis in light of the results obtained with this study.

Appendices: Additional information and plates are included in four separate volumes, as Appendices A-D (on CD-ROM).

CHAPTER 2

SETTING THE SCENE: THE LATE BRONZE – EARLY IRON AGE TRANSITION IN BRITAIN AND EUROPE: HISTORY OF RESEARCH

2.1. Introduction

Throughout the twentieth century Late Bronze Age and Early Iron Age studies were independent and the transition was rarely the focus of academic research. Being firmly rooted in the traditions of Late Bronze Age metalwork, cast copper alloy Transitional metalwork (e.g. the Llyn Fawr metalwork assemblage) was always considered to belong to the Late Bronze Age rather than the Early Iron Age – which in turn was characterised by a distinct lack of bronze metalwork. Researchers were reluctant to accept that artefacts belonging to the Llyn Fawr metalwork assemblage (O'Connor's transitional period '*LBA4/EIA1*'; O'Connor 1980) were in fact, of Early Iron Age date (Burgess and Coombs 1979; O'Connor 1980; Huth 1997).

The first decade of the 21st century saw a shift in these views, however. The more wide-spread availability of radiocarbon dates and Continental dendrochological dates for metalwork from Early Iron Age Hallstatt C graves dated metalwork earlier than previously thought (Rohl and Needham 1998; Hennig 1998; Watson 1999). Even though independent radiocarbon dates confirmed the relative chronology and validity of British traditional metalwork typologies it was now understood that items of the Llyn Fawr metalwork assemblage were the first metalwork assemblage of the Iron Age and not the last metalwork assemblage of the Bronze Age (O'Connor 2007a; Gerloff 2010).

2.2. British transitional metalwork: a review

The study of metalwork hoards has not been straight-forward. Hoard studies in general sat, rather uncomfortably, between factual typology, classification, distribution and metallurgy of the individual types of metalwork on one side (for example Burgess and Coombs 1979, Burgess 1974, Pendleton 1999, Northover

2004) and studies that favoured the discussion of deposition practices and interpretation on the other (for example Bradley 1990, Brück 2001). The reason for these two very different approaches is understandable: for a number of older finds, information about their depositional context is irretrievably lost and studies of typology and classification seemed to be the only meaningful way out of this circumstance.

The first systematic account that looked at the Bronze Age metalwork of the British Isles in detail was John Evans' (1881). In his account, Evans offers an in-depth discussion of bronze metal types favouring a three-period system for the British Bronze Age, wherein the stage that concerns us most is his the third which, Evans argued, was characterised by palstaves and socketed axes (Evans 1881, 473).

Another early yet thorough and very formal approach towards the periodisation of the British Bronze Age was undertaken by Montelius who, in 1908, applied a system to the British Bronze Age that is comparable to the one which he had successfully applied to the Nordic Bronze Age suggesting five Bronze Age periods for Britain, with Periods IV and V being characterised among other objects by socketed axes (Montelius 1908, 58-66).

Montelius' periodisation was questioned by Fox (1923) who considered all socketed axes part of Period V (Fox 1923, 16-19, 57-62). Another critic of Montelius' system was Childe (1930) who put forward the idea that the British Late Bronze Age could be correlated with the Central European Urnfield Culture. According to Childe's chronology, the Late Bronze Age was followed by La Tène (Childe 1930, 153-55). In the same year, Hawkes reintroduced the idea that small bands of 'Celtic people' migrated to Britain, a movement of groups of people who in the archaeological record were characterised by pottery of Hallstatt character (Eastbourne, Sussex; Budgen 1922, 354-360). On his work on St Catherine's Hill, Hawkes introduced the term 'Iron Age A' for the earliest period of the British Iron Age which was supposedly represented by this immigrant Hallstatt culture (Hawkes 1931a, 64). According to Hawkes, the Iron Age in Britain was characterised by three successive waves of immigrants from the Continent: Iron Age A: Hallstatt, Iron Age B: La Tène, Iron Age C: Belgic (Hawkes 1931b); a scheme that was later challenged because it relied on a

particular historical supposition, that is that the British Iron Age was the product of successive waves of invasions from the Continent (Hodson 1964, 99-110).

While the first half of the 20th century saw these first attempts to tackle the British Late Bronze Age-Early Iron Age transition, it also saw the first detailed artefact studies which would become more important for establishing a relative chronology later, e.g. accounts on spearheads (Greenwell and Parker-Brewis 1909, 1-16), swords (Parker-Brewis 1923, 253-265), swan's neck pins (Dunning 1934, 269-95), socketed sickles (Fox 1939a, 222-248), razors (Piggott 1946, 121-141) and bronze vessels (Hawkes and Smith 1957, 131-98). It was Dunning's work, as well as the excavation of the Early Iron Age settlement at West Harling (Norfolk), published by Clarke and Fell in 1953, that aided Childe in defining pottery and metalwork of the Earliest British Iron Age (Childe 1940, 194-207; Clarke and Fell 1953, 1-39). However, it is noteworthy here that amongst this rich corpus of artefacts studies, there was none about socketed axes, even though there would have been enough material to study. Unsurprisingly, it was these early artefacts studies which formed the basis for the later 20th century research on relative chronology and typology of the British Late Bronze and Early Iron Ages.

British Early Iron Age metalwork was never truly detached from its Continental background and Continental research into relative chronology of Central Europe usually had an impact on British archaeology, too. This is evidenced by the Central European terminology introduced to explain the origin of British contexts and describe the British Early Iron Age material (Hawkes 1931b; Hodson 1964).

In 1959, the most significant Continental approach towards the relative chronology of the Late Bronze and Early Iron Ages in the Alpine region was published by Müller-Karpe, in which he tentatively proposed three Late Bronze Age phases (c. 100 years for each Hallstatt B1, B2 and B3); these were confirmed by dendro-chronological dates in 1995 (Müller-Karpe 1959; Rychner 1995, 484).

Hawkes' (1959) approach to the Early Iron Age in Britain, published in the same year as Müller-Karpe's work on the Continental Urnfield Culture, was somewhat less structured but his phases subsequently shaped our understanding of the British Iron Age. Hawkes argued that the great number of regional approaches

published in the earlier part of the century demanded a review of a common scheme of terminology (Hawkes 1959, 171).

In 1960, Hawkes gave an unpublished lecture in which he proposed the adoption of a threefold system for the British Bronze Age similar to that used for the Iron Age, a scheme that achieved general approval and was also used by Burgess in his definition of Later Bronze Age metalwork (Hawkes 1960; Burgess 1968a, 1-45).

After the development of a new programme of metallurgical analysis for separating unleaded Middle Bronze Age and leaded Late Bronze Age bronzes which was valid, at least, for South-Eastern Britain (Burgess 1962, 23), published by Brown and Blin-Stoyle in 1959 it became clear that Late Bronze Age metalwork typology was in dire need of revision (Brown and Blin-Stoyle 1959, 188-209; Smith 1959, 144-59; Butler 1963, 37-48; Burgess 1969, 22-24). In particular Burgess argued that research published in the 1960s demonstrated the enormous gaps in our knowledge of Bronze Age chronology (Burgess 1969, 22-23).

Figure 2.1: The iron Mindelheim type sword from Llyn Fawr (Glamorgan)

Burgess (1968a) presented an approach in which he looked at all significant metalwork types occurring in the Later Bronze Age of the British Isles and Northern France; he described the contexts of finds and assigned them to four stages, the last one (IV) being transitional to the Early Iron Age on the Continent, that means a British Late Bronze Age stage which included metalwork that showed Continental Hallstatt C influences (Burgess 1968a, 26-28). According to Burgess, these influences could be seen in the hoards from Llyn Fawr and

Cardiff II (Glamorgan, nos. 1292-1293+1294-1299, fig. 2.1) and the hoard from Sompting (Sussex, nos. 1009-1025).

Burgess (1968a, 28) argued that the metalwork in his transitional hoards suggested that large, heavy socketed axes with pronounced collars and often displaying a distinctive decoration of ribs ending in pellets and roundels were characteristic for the transitional period. With Burgess' analysis, a new basis for finding and describing the most characteristic type of Early Iron Age metalwork was established. However, at that point Burgess still referred to the transition period and was not referring to these hoards as 'Early Iron Age'. Instead, while describing the metalwork of his Phase IV, Burgess (1968a, 26) conceded that in order to further our understanding of this period, much more groundwork needed to be done on the British Late Bronze Age/Early Iron Age metalwork itself, especially socketed axes and Gündlingen swords (e.g. fig. 2.2; Burgess 1969, 22).

Figure 2.2: The Ferring Hoard (Sussex, nos. 999-1008; image courtesy of Worthing Museum)

In 1971, Burgess coined the type name 'Sompting' for the large, heavy axes which he considered were characteristic for the transition period. In his 1971 study he argued that they derived their back-to-front mouths from the shape of Armorican axes and because of that he considered them to be contemporary with this French axe type.

In the same study Burgess also suggested that most of British Carp's Tongue metalwork may have been consigned to the ground during a period of Hallstatt C influence (Burgess 1971, 267-272). This observation turned out to be of importance for the relative chronology of the British Late Bronze Age/Early Iron Age transition period. In 1974, Burgess coined the term 'Ewart Park' as the type name for the bulk of British Late Bronze Age metalwork that precedes the Hallstatt-influenced metalwork of the Early Iron Age (Burgess 1974, 165-233).

More detailed studies of Early Iron Age metalwork and pottery followed in the 1970s. Harding furthered Hawkes' work of the late 1950s, suggesting that the material of the earliest Iron Age in Britain could be equated with the Continental Hallstatt C cultures (Harding 1974, 129-30), and in his Cambridge thesis, Cunliffe defined a number of Iron Age ceramic styles zones in Southern Britain, suggesting the crystallisation of tribes or groupings in the Early Iron Age (Cunliffe 1974, 49-56). Cunliffe argued that in Southern Britain, the Deverel-Rimbury Culture was followed by the Early All Cannings Cross group (Cunliffe 1978, 34).

Generally speaking, the 1970s saw a developing understanding of which metalwork and ceramic types characterised the British Late Bronze Age/Early Iron Age transition. In 1976, Burgess named the metalwork assemblage of the latest phase of the British Bronze Age 'Llyn Fawr', after the transitional hoard from Glamorgan (Wales) and at the end of the decade it was no longer only hoards and single finds that were seemingly characteristic of the transition period, but also settlement sites like Staple Howe (Yorkshire) and All Cannings Cross (Wiltshire) (Burgess 1976, 51-79; Collis 1977, 6-7).

Although a general picture of the Late Bronze Age/Early Iron Age transition period was emerging at the time, Burgess still criticised the state of research and called for more detailed studies of the British Late Bronze Age/Early Iron Age metalwork types, since Late Bronze Age 'Ewart Park/Carp's Tongue' metalwork types and transitional 'Hallstatt/Llyn Fawr' metalwork types were still kept strictly apart without much evidence for a geographical or chronological overlap (Burgess 1979, 269). Burgess himself argued that the small hoard from Boyton (Suffolk) strongly suggested simultaneity of Ewart Park and Hallstatt metalwork to some extent at least (the hoard included the fragment of a

Gündlingen sword wedged into the socket of a South Eastern socketed axe). However, since it was still unclear how exactly the overlap presented itself, Burgess argued further that there remained an urgent need for further research to be done on the large corpus of transitional metalwork as well as a revision of the relative chronology of the transition period (Burgess 1979, 269-270). In the same volume Burgess and Coombs criticise 20th century artefact studies which had become increasingly unfashionable (Burgess and Coombs 1979, 1).

In the 1980s however, three influential theses were published (O'Connor 1980; Schmidt and Burgess 1981 and Pearce 1983). According to O'Connor (1980, 158) Late Bronze Age 3, the latest stage of the British Late Bronze Age, was represented by the Ewart Park metalwork assemblage which correlates with Central European Hallstatt B3 and Montelius V of the Nordic Circle, but is most closely connected with the French Bronze Final III, a connection which is clearly mirrored in the unique metalwork of the Carp's Tongue Complex that is found both in Northern France and South-Eastern Britain (O'Connor 1980, 158). O'Connor's transitional phase is Late Bronze Age 4/Early Iron Age 1' which is characterised by Hallstatt C and D imports and the development of purely native as well as Hallstatt-influenced native metalwork is named after the largest and most diverse hoard from Glamorgan (South Wales), 'Llyn Fawr phase' (O'Connor 1980, 15-16; 306-7; Needham 1996, Needham *et al* 1997). Both Pearce and O'Connor argue that the change from bronze- to iron-using communities was a most significant one, leaving their mark on society as well as economy even though evidence for this is difficult to establish (O'Connor 1980, 15; Pearce 1983, 183). At the same time, it was still unclear whether or not some artefact types of the corpus of Late Bronze Age/Early Iron Age transitional metalwork were part of the indigenous metalwork assemblage or imports from the Continent, for example certain types of swords, razors and daggers (Jope 1961, 307-343; Cowen 1967, 377-453; Schauer 1972b, Meyer 1984/85, 78-84).

In all these theses there was never any doubt that decorated socketed axes were a native product. Even though they seemed quite different in appearance from British Late Bronze Age socketed looped axes, they did not seem worth including in Meyer's study on Hallstatt imports because they did not have any

direct forerunners on the Continent either. Nevertheless, Meyer argued that not all of the 'Hallstatt objects' found in Britain were imports, but the majority of them were possibly of local manufacture instead – a view that was later confirmed by Warmenbol and O'Connor (Meyer 1984/85, 79; Warmenbol 1988, 244-245, O'Connor 2007, 71-74). However, the exact origin and development of certain artefact types remained unknown, especially swords and chapes although several accounts on the origin and development of Hallstatt swords had been published in the preceding decades (Cowen 1967, 377-453: Schauer 1972a, 103-114; Schauer 1972b, 261-270; Warmenbol 1988, 240-277; Burgess and Colquhoun 1988; Hein 1989, 301-326). Recently Gerloff found a plausible solution to the problem, suggesting that many Continental metalwork types (including Gündlingen swords and associated chapes) find their immediate predecessors in Atlantic rather than Central Europe (Gerloff 2004, 124-154).

Figure 2.3: The Mylor Hoard (Cornwall, nos. 147-179; image courtesy of Anna Tyacke, FLO for Cornwall)

The late 1980s and 1990s did not see much development in artefact studies – a trend contrasted to the massive increase in Late Bronze and Early Iron Age

hoards discovered in the past 20 years, especially from Eastern and South East England. It seems that the large amount of metalwork discouraged most prehistorians from taking a closer look at individual artefact types. Instead of individual artefact studies, there was an increase in studies on economy, society and religious beliefs of the Late Bronze and Early Iron Ages (e.g. Thomas 1989, 263; Bradley 1990; Cunliffe 1991, 54, 524-25; Collis 1996, 1). Furthermore, dendro-chronology and radio-carbon dates helped to further our understanding of the absolute chronology of the transition period (Needham 1996, 121-40; Needham *et al.* 1997, 55-107) and metallurgical analysis suggested a different understanding and treatment of metalwork during the transition period (Northover 1988, 75-85; Northover 2004).

Discoveries of Early Iron Age hoards of bronze metalwork remain, however, rare and O'Connor's recent brief discussion of the material (2007, 64ff) includes all new finds except the hoards from Mylor (Cornwall, nos. 147-179, fig. 2.3), Langton Matravers (Dorset, nos. 226-598, fig. 2.4), Wardour, Hindon and Tisbury area (Wiltshire, nos. 1354-1387, fig. 2.5; 1388-1392; 1410-1412).

Figure 2.4: The Langton Matravers hoard(s) (Dorset, nos. 226-598, image courtesy of PAS/BM)

O'Connor (2007, 64) acknowledged that for the various hoards belonging to the

Llyn Fawr phase of the British Bronze Age many scholars now prefer the term ‘Earliest Iron Age’. Even though both Late Bronze Age and Early Iron Age hoards contain, to a great extent, socketed axes, the individual axe types are very different and are rarely found associated with one another (O’Connor 2007, 68). O’Connor showed that the Llyn Fawr phase stretched nearly 200 years (c. 800-600BC) with the hoard from Ferring (Sussex, nos. 999-1008) dating from c. 800-750BC, the Llyn Fawr and Cardiff (Glamorgan, nos. 1294-1299+1292-1293) hoards dating from c. 750-675BC and the Sompting (Sussex, nos. 1009-1025) hoard dating from c. 650-600BC (O’Connor 2007, 73-74, fig. 7; Milcent 2012, 155+165).

Figure 2.5: Part of the Vale of Wardour hoard (Wiltshire, nos. 1388-1392)

Only a few metalwork types have been researched in detail in the past decades, mainly because artefact studies had become deeply unfashionable. The amount of Late Bronze Age/Early Iron Age metalwork that has been identified since the 1980s has now become so diverse and numerous with artefact types and contexts to contemplate that it is often considered too overwhelming.

2.3. A peaceful transition? Interpreting the difficult relations between transitional metalwork hoards and contemporary settlements

For most of the latter half of the 20th century, Late Bronze Age research in Britain focussed on the study of metalwork while research into Early Iron Age matters was, de facto, the study of settlements and especially hillforts. There has been little overlap between the two fields because metalwork hoards are not generally found in settlement contexts and settlements do not normally produce large amounts of metalwork or metalworking debris. Recently researchers have started to look at both hoards and settlements together in the search for common ground (e.g. Barber 2001, 2003, 18; Pendleton 2001, O'Connor 2007b and Sharples 2010).

Figure 2.6: Examples of Late Bronze Age metalwork from the Breiddin (Powys)

Metalwork was looked at without considering the immediate and wider contexts surrounding the discoveries and metalwork studies were governed by classification and typology which does not say anything about their original significance (Bradley 2007, 179). Detached from contextual evidence (which in the past was often not recorded as considered insignificant), the study of hoard deposition was solely concentrated on answering the 'what' and the 'why' rather than the 'where' and 'how'.

Since Evans' 1881 pioneering work on British Bronze Age metalwork and his introduction of the three categories 'founders' hoards', 'personal hoards' and 'merchants' hoards' (Evans 1881, 457) scholars have tried to fit new hoards into one of these categories. According to Evans, most hoards were buried for safe-keeping, and the contents of each hoard should

give us a clue as to who may have buried it. ‘Personal hoards’ were generally smaller, with more diverse, ‘personalised’ contents and possible heirlooms. According to Evans (1881, 457-459), larger hoards should be viewed as more impersonal collections, i.e. the stock-in-trade of a merchant or possibly a metalworker’s toolkit. Evans’ third category, ‘merchants’ hoards’ included mainly unworked, unbroken artefacts. However, most hoards are so diverse and the regional as well as contextual differences so great that it would be very unwise to categorise them using such a rigid and outdated system (Bradley 1990).

The pre-dominant interpretation for hoard deposition has always been ‘safe-keeping’, that is depositions made with the intention to recover. However, “today we have clear and unambiguous […] evidence that deposition in the Bronze Age could be non-random, selective and purposeful, with no intention to recover” (Barber 2001, 164), even though not every researcher agrees with this (Pendleton 1999; 2001, 170-178).

If the transition from the Late Bronze Age to the Early Iron Age had been an era of aggression, uncertainty, tension and conflicts we might see why so many hoards have not been recovered, but there is no supporting evidence for this from settlement and burial contexts (Darvill 2010, 244). Late Bronze Age hoards are often seen as both evidence and reaction to these so-called ‘difficult times’ for which we have otherwise no evidence at all. Some significant settlement evidence suggests that sites first built in the Late Bronze Age carried on through the Early, Middle and possibly Late Iron Age without any major interruption, for example Danebury (Hampshire), the Breiddin (Montgomeryshire/Powys, fig. 2.6) and Staple Howe (Yorkshire) to name a few (Brewster 1963; Cunliffe 1984; Musson 1991). Settlements were becoming more diverse and they were occupied more intensively and for a longer time (Bradley 2007, 210). Furthermore, the building types within the settlements seemed to be more diverse and built for a specific, possibly communal purpose, i.e. granaries, pits or storehouses. Generally speaking, it seems that within the individual communities, efforts were directed towards land clearance, land division, food storage and possibly work specialisation, but not necessarily conflict, aggression and fighting.

One example and significant indication of conflict may be the long linear earthworks which may define smaller and larger territories, mainly attested for on the Wessex chalk uplands (Bradley at al 1994). These linear earthworks usually run from the river valleys towards the uplands and along the hill crests (Bradley 2007, 211). These land divisions were once interpreted as possible boundaries for cattle (Cunliffe 2004) or sheep grazing (McOmish 1996, 68-76) but both Bell (2007, 212) and Bradley (2001, 6-7) suggest that they may have had a more universal purpose for land division in general, i.e. demarcating territories which would have contained a variety of different resources, such as grazing land, arable land, access to fresh water and summer pasture (Bradley 2007, 212; Bell 2001, 6-7). Even though these boundaries are usually assigned to the Iron Age, radiocarbon dates suggest that some of their development was already started in the period 1000-800BC, meaning that by the Early Iron Age they were established and needed to be curated and reinforced, probably literally as well as spiritually.

Figure 2.7: Late Bronze Age metalwork from Traprain Law (East Lothian)

This corresponds with the establishment of hilltop fortifications or hilltop enclosures, more commonly known as hillforts. Recent research and radiocarbon dates suggest that a great number of the formerly Iron Age hilltop settlements were established in the Late Bronze Age, but continued to be reinforced and inhabited during the Iron Age (Bradley 2007, 222). Late Bronze Age metalwork was found in the settlement debris on the Breiddin (Powys, fig. 2.6) and Traprain Law (East Lothian, fig. 2.7+2.8) and a hoard of Bronze Age and Early Iron Age metalwork was associated with the hillfort of

Danebury (Hampshire, nos. 686-689).

This intensification of land-use, and the establishment and reinforcement of territorial boundaries and large hilltop settlements may have been the results of a drastic climatic deterioration at the beginning of the first millennium BC which lasted throughout the British Late Bronze Age and the Earliest Iron Age (Bell 2001, 5). The economic effects of this will have varied from region to region with a marked distinction in the reaction of the inhabitants of both the British Lowland and Highland Zones (as established by Fox, 1932). Bell (2001, 7) suggested that in the Highland Zones of north and western Britain agriculture would have become less feasible, whilst the new wetter climate would have facilitated the expansion of agriculture in East Anglia. The change in climate in this part of England may be been the cause for freshwater flooding in the 7th century BC.

The intensification of agriculture that we see in the centuries between 800-600BC amount to the 'creation of man-made agricultural landscapes' (Bell 2001, 12; Jones 2001, 29), that is large areas cleared of trees and shrubs and made available for agriculture.

The intensification of agriculture during the Late Bronze Age – Early Iron Age transition was accompanied by the gradual appearance of metals (bronze and iron) within the sphere of agriculture (Jones 2001, 30). In addition to the appearance and increase of the number of iron tools such as socketed iron axes and iron harvesting sickles, Jones suggests that a metal tip attached to the ard plough would have made it easier

Figure 2.8: Late Bronze Age metalwork from Traprain Law (East Lothian): socketed axes

to pull the implement through wet and sticky soils (Jones 2001, 30).

This evidence for an increase in land clearance and agricultural intensification as well as the changing artefact composition of Late Bronze Age and Early Iron Age hoards suggest a change in which artefact types were considered more essential and 'more exceptional' that others. Socketed axes outnumbered all other artefact types found in Late Bronze Age and especially Early Iron Age hoards. As we will see in this thesis, hoard contents and deposition practices change drastically in the favour of socketed axes and, to a lesser extent, socketed sickles, reflecting perhaps the increase in the importance of tools such as sickles and socketed axes over swords and spearheads which were deposited in much the same way throughout the Late Bronze and Early Iron Ages. Agricultural tools made from bronze or iron must have been considered indispensable at times of increased land clearance and intensified agriculture. It was everyday tools such as socketed axes and socketed and tanged sickles that were the first objects to be copied plentiful in iron, not weapons like swords, daggers and spearheads.

2.4. The arrival of iron

Figure 2.9: Part of the Balmashanner hoard (Forfar/Angus): top part of a Late Bronze Age socketed axe and an iron ring

There is only sparse evidence for iron-working in these islands before the beginning of the Llyn Fawr period in c. 750BC. In 1979, Burgess argued that "…the spread of iron-working is usually regarded as a long and drawn out process…and, in most areas, only sporadic use, let alone manufacture down to c. 500BC…" (Burgess 1979, 273). In the last 30 years not much evidence has come up that would challenge this view. Burgess argued further that, since "…iron corrodes so quickly in the ground compared with bronze, and is visually uninspiring… it is

Figure 2.10: the iron sickle from the Llyn Fawr hoard (Glamorgan, found with axes nos. 1294-1299)

hardly surprising that little early iron has been noticed." (Burgess 1979, 273) However, this view has changed and although iron might still be 'uninspiring' to many non-archaeological finders of archaeological objects, it certainly has become more 'inspiring' for excavators of Late Bronze Age settlements and researchers. Early iron objects are still very rare in Late Bronze Age settlements, but so, too, are copper-alloy artefacts. Further, although iron may corrode more readily than bronze, it still has good potential for survival, so corrosion need not be the main cause of the low number of early iron artefacts. The socketed iron sickle and iron sword plate from Llyn Fawr, for example, were discovered in excellent condition (figs. 2.1+2.10).

The first iron objects were not produced or imported to these islands in the Early Iron Age. Iron artefacts are known from the Late Bronze Age hoard from Balmashanner, (Forfar, Angus: an iron ring, fig. 2.9) and the settlement at Castle Hill, Scarborough (piece of iron rod) (Burgess 1979, 273).

Figure 2.11: Part of the Hindon hoard (Wiltshire): very worn heeled iron sickle, just after excavation. Image courtesy of Katie Hinds, FLO (PAS)

However, recent investigations of an ironworking site near Hartshill, Berkshire, which could be dated to c. 1000BC represents the earliest securely dated evidence for iron in Britain (Collard *et al* 2006; Brett *et al* 2003, 20, 36-37). The site at Hartshill is broadly contemporary with the earliest phase of iron use on the near continent (Rovira 2001, Gomez de Soto *et al* 2006) and it certainly predates the few iron objects found in British Early Iron Age hoards, that is the hoards from Sompting (Sussex), Llyn Fawr (Glamorgan), Hindon and Melksham (Wiltshire, fig. 9.11). Roberts suggests that the ironworking at Hartshill also predates other evidence for ironworking from 7th century BC contexts such as from Cooper's Farm, Berkshire and Potterne, Wiltshire (Fitzpatrick 1995; Lawson and Allen 2000; Roberts *et al* 2015).

It is a generally accepted view that the first iron artefacts represent close copies of their bronze forerunners. This makes sense because, by the time of the transition from the Late Bronze to the Early Iron Age, bronze tools and weapons had been developed and improved for over 2000 years and objects such as socketed axes and sickles and smaller cutting tools had reached their optimal design (socketed gouges, tanged chisels and awls are still used today and the shapes of axes and hand-held sickles have not changed much, either).

The first bronze objects which were copied in iron were socketed axes, sickles, smaller tools and spearheads on the one hand, and pins and brooches on the other. While the change of material in the latter did not last (Middle and Late Iron Age pins and brooches were, again, made from bronze), iron tools and weapons quickly replaced their bronze forerunners, a view which stands in contrast to

Figure 2.12: Iron socketed axe from Rahoy (Morvern/Argyllshire: no. 1403)

Burgess' suggestion that the introduction of iron was a 'long and drawn-out process' (Burgess 1979, 273).

The speed with which iron replaced bronze has not left many traces in the archaeological record of the Early Iron Age, but it is significant that early iron artefacts seem to appear in different British contexts at approximately the same time. Certainly, although some regions, e.g. the Thames Valley, will have experienced the change a little sooner than others, not much time went by before iron had reached the furthest corners of the British Isles. The distribution of the earliest iron socketed axes in central areas of this country focussed on the Thames Basin and South Wales, with most of them found in Essex, Greater London, Buckinghamshire, Oxfordshire and the Vale of Glamorgan in South Wales. The distribution of the earliest iron spearheads from London, Melksham (Wiltshire) and Llyn Fawr (Glamorgan) mirrors the distribution of socketed axes. Burgess has already suggested that, with the earliest iron sickle and sword found at Llyn Fawr, the Bristol Channel region was probably a very early centre for the production of iron artefacts. The recent discovery of at least three iron socketed axes from Penllyn Moor (nos. 1328-1330) and the possible bronze and iron metalworking and midden site of Llanmaes (nos. 1405-1407etc) in the Vale of Glamorgan certainly underline the importance of the region (Burgess 1979, 273, A.Gwilt, *pers. comm.*). However, the speedy change from bronze to iron working and production of iron artefacts was not limited to Southern Britain. It seems that news of iron working travelled fast: early iron socketed axes were discovered as far away as the settlements at Rahoy (Argyllshire: no. 1403, fig. 2.12) and Culbin Sands (Morayshire: no. 1267) as well as in the Early Iron Age layers of Traprain Law (Midlothian: no. 1404, fig. 2.13), all in Scotland. Soon, at all these settlements, other tools were copied in iron, e.g. socketed gouges and tanged awls and chisels.

Figure 2.13: View inside the socket of the iron axe from Traprain Law (Midlothian, no. 1404)

Even more impressive is the spread of iron ring-headed and swan's neck pins. The change from bronze to iron and back to bronze pins happened so quickly that by the end of the Early Iron Age, iron pins were no longer in use and they were, again, made from cast bronze which is a much more suitable material. These earliest iron pins seem to have appeared almost simultaneously in several parts of Britain which are quite a long distance away from each other, e.g. Wandlebury (Cambridgeshire), Harlyn Bay (Cornwall), North Lodge (Northamptonshire), Ham Hill (Somerset), All Cannings Cross and Cold Kitchen Hill (Wiltshire), Dunagoil (Bute), Bonchester Hill (Roxburghshire), North Uist (Western Isles), Dinorben (Denbighshire) and Llanmaes (Vale of Glamorgan).

However, while British Early Iron Age communities quickly went back to producing bronze pins and brooches, the production of iron tools continued. The new material could not be cast like bronze in moulds and needed to be hammered and welded into shape. However, while it is more complex to shape an iron object than to cast a bronze one, it also takes more effort to finish off the bronze object that means that it is easier to hammer iron than bronze. The entire corpus of early iron socketed axes were made from wrought iron. This means that the iron piece was hammered into a strip plus wings on either side which would then be welded together to form a socket; the loop was welded on separately (Manning and Saunders 1972, 279). The practice of producing socketed axes was eventually discontinued altogether and while later axes had shaft holes, other tools like awls and sickles went back to easily welded ring-

sockets or tangs (e.g. Hod Hill (Dorset), Potterne and All Cannings Cross (Wiltshire)).

It could be argued that iron had more advantages than disadvantages over bronze or the prehistoric communities would not have adopted this metal so quickly and abandoned bronze as their main material for tools and weapons. However, Northover argues that iron was probably not as advantageous in performance as previously thought; he suggests that what would have made iron attractive for daily use was its superior toughness and resistance to brittle fracture. “Cast bronze”, he argues, “is brittle and fracture was a common mode of failure in bronze tools” (Northover 1995, 287). Although iron superseded bronze, it was not an easier material to produce.

The arrival of iron and its superseding of bronze has often been quoted as the main reason for the deposition of metalwork in the South East. This practice of wholesale dumping of surplus bronze appeared to coincide with the rapid spread of iron working and given that these hoards were not recovered after deposition but simply left where they were, this suggests that bronze was not needed anymore. Needham and Burgess argue that “… with ironwork flooding the market and bronze no longer in high demand for recycling, bronzes were simply thrown away or placed in traditional hiding places and forgotten” (Needham and Burgess 1980, 456). Pearce agreed, arguing that, “…the final axe hoards may be the result of metal-caching by bronze smiths who were seeing their trade made redundant as iron working spread” (Pearce 1983, 120).

Northover, however, does not see the spread of iron as the main reason for the abandonment of bronze. He believes that this idea is ‘too simplistic’ stating that the amount of metalwork that was deposited in the ground during Hallstatt D in most part of Atlantic Europe was rapidly declining (Northover 1995, 258). He claims that since there were only a few iron objects and almost no gold artefacts, “…the impact of iron was not instant and dramatic and it occurred during a time in which the existing metal industry was being greatly affected by other social and economic changes” (Northover 1995, 258).

2.5. The Late Bronze to Early Iron Age transition in Europe

The Early Iron Age metalwork and contexts of Ireland, Northern France, the Netherlands and Belgium are relevant to the discussion of British Early Iron Age metalwork. In this section they will be briefly discussed and set in context. A brief overlook of the Central European Late Bronze Age – Early Iron Age transition is necessary to set the scene.

2.5.1. Central Europe

The Late Bronze Age in Central Europe was characterised by the Urnfield Culture, a phenomenon that dates from Reinecke's Bronze Age D to Hallstatt B (Müller-Karpe 1959, 144-50, 182-6). As the name suggests, it is characterised by its predominant burial rite: cremation burials in flat grave cemeteries. The Late Bronze Age/Early Iron Age transition period in Central Europe has traditionally been looked at as a time when traditions of bronze production and bronze working as well as the deposition of metalwork changed drastically.

The fundamental study for the relative chronology of the Late Bronze Age in Central Europe is still Müller-Karpe's *Die Urnenfelderzeit nördlich und südlich der Alpen* (1959). Therein, Müller-Karpe defined six chronological subdivisions, based on Reinecke's system: Reinecke D, Hallstatt A1, A2, B1, B2 and B3 although the validity of the last two periods, Ha B2 and B3, was questioned later by Müller-Karpe himself (1966, 97) as well as others (Jacob-Friesen 1967, 67-68; Schauer 1971, 15; Jockenhövel 1971, 22-3; Eggert 1976, 93-105, O'Connor 1980, 30).

The Urnfield Cultures of Central Europe were followed by two Early Iron Age Hallstatt periods, named Hallstatt C and Hallstatt D after Reinecke's terminology. They are generally subdivided into five phases: Hallstatt C1, C2, D1, D2 and D3 (Kossack 1959, 23-31; Taf. 15; 16; Zürn 1942, 116-124; 1952, 38-45). However, similar to the subdivisions of Hallstatt B, the validity of Hallstatt D3 is questioned in some regions (Polenz 1973, 107-202; Spindler 1975, 223-228). The most comprehensive study is that of Kossack (1959) who based his subdivisions of the Hallstatt periods on material from Southern Bavaria and whose influential work was later also used for correlation with

Mediterranean chronologies (Dehn and Frey 1962, 197-208; Peroni 1973, 48-78).

During the later Bronze Age, there was a change in society towards a more hierarchical structure and in Central Europe, this elite is reflected in the archaeological record with high-status burials (wooden chambers under tumuli) that included feasting (cauldrons, cups and basins) and riding (horse harness and wagon fittings) equipment (Härke 1989, Hennig 1998; 2001). It is noteworthy that socketed axes did not play an important part on any of the Continental European sites at all, neither on hillforts nor in graves. However, in Britain socketed axes were found associated with feasting and riding equipment as well as, in some instances, on or near hilltop settlements, for example Danebury (Hampshire, nos. 686-689).

Quoting Härke (1989, 186) on the rise of a local elite in Central Europe at the time, the presence of feasting and riding equipment would point towards their importance in a social context and the significant role they played defining British Early Iron Age hierarchies. However, whilst the character of Continental hilltop settlements remained mainly agrarian, evidence suggests that they were also centres of craft production and that they were becoming increasingly involved in long-distance trade (Härke 1989, 188). These contexts suggest the beginning of urbanism in temperate Europe (Wells 1989, 13). They were built with an emphasis on defence, sometimes at the expense of communication and agricultural production (Härke 1989, 191).

In the Early Iron Age (Hallstatt D) we see a different kind of hillfort emerge from this group of hillltop settlements: the so-called '*Fürstensitze*'. These elite settlements took over the rôle of dominant sites in the area and are characterised most of all by imports from the Mediterranean (Pare 1991, 183). Based on Kimmig's model for Hallstatt society in Central Europe, Pare argued that this Mediterranean stimulus effectively caused the formation of a new kind of social organisation in the late Hallstatt period in the area North West of the Alps, documented by the establishment of 'princely settlements' and the burial of the elite in 'princely graves' (Pare 1991, 183-4; Kimmig 1969, 95-97). However, Pare himself re-evaluated this model five years later and argued that according to his own research, the intensification of trade between the West

Hallstatt area and the Greek colonies in the Mediterranean need not be dated before ca. 525BC. This would indicate that trade with the Greek colonies did not have as much impact on the emergence of the Central European Hallstatt Culture as was previously thought (Pare 1991, 184).

Figure 2.14: Cheek piece from Court-St-Étienne, Tombelle A (Brabant, Belgium)

2.5.2. Cross-Channel Relations and Atlantic Fringe

Britain's relations with the regions located directly across Channel were strong in the Early Iron Age. It is relevant to this thesis to take a closer look at the Dutch and Belgian Early Iron Age material while the French material is less relevant to contemporary British Early Iron age metalwork.

There is no independent system for the relative chronology of Belgium and the Netherlands and their Bronze and Iron Age material is generally dated by reference to the relative chronologies of their immediate neighbours, i.e. the material is typologically dated either according to the French system, Reinecke's chronology for Central Europe (see above) or Montelius' periods for the Nordic Circle (O'Connor 1980, 31; Butler 1969, 75; de Laet 1974, 349-51; Bourgeois, Verlaeckt and van Strydonck 1996, 143).

Figure 2.15: Cheek pieces from the Llyn Fawr hoard (Glamorgan, found with axes nos. 1292+1293)

In Belgium and the South of the Netherlands, the beginning of the Early Iron Age can be equated

with the beginning of Hallstatt C in Central Europe (Butler 1969, 86; de Laet 1974, 392-437). Generally, Hallstatt C burials in these regions can be divided into two groups: richer barrow burials which are usually associated with Hallstatt warriors and less well-equipped flat graves in the local Late Bronze Age tradition. The most significant case study to date for both groups comes from Mariën's analysis of the cemeteries at Court-St-Étienne (Brabant, Belgium) (Mariën 1958). Therein, Mariën suggested that this site like others in its vicinity show that Late Bronze Age cemeteries continued in use alongside more ostentatious Hallstatt C burials and that both grave types are characterised by the traditional burial rite of cremation (Mariën 1958, 193-95). It seems that here the social structure changed at the beginning of the Early Iron Age and a local elite emerged that had strong connections to Central Europe. This change in burial rite and treatment of grave goods was studied in more detail by Warmenbol (1993). He argued that Court-St-Étienne and the neighbouring sites of Gedinne 'Chevaudos', Louette-Saint-Pierre 'Fosse-au-Morts' (Namur) and Limal (Morimoine, Brabant) belonged to the group 'Mosan' which he identified as a sub-group of the '*Westhallstattkreis*' (Warmenbol 1993, 83). This group in particular shows that in the Early Iron Age bronze and iron swords were treated differently in the burial context: while bronze swords were still burnt on the pyre and usually broken up prior to deposition, iron swords were bent before being added to the grave (Warmenbol 1993, 101).

Figure 2.16: Two razors from Basse-Wavre and Schoonarde (Belgium): Single finds, dredged from Schelde at Schoonarde and Basse-Wavre

Figure 2.17: Part of the Salisbury hoard (Wiltshire): three razors found with socketed axes nos. 1061-1202

The archaeological evidence suggests that while the group 'Mosan' no longer upheld strong affinities with Western France, the connections with Central Europe as well as Britain had increased (Warmenbol 1993; figs. 2.14+2.15, Milcent 2012). This is not only exemplified by the distribution of Thames and Gündlingen swords in these areas (Gerloff 2004, fig. 17.8), but also the distribution of Early Iron Age razors (Jockenhövel 1980, figs. 2.15-2.17). Endingen type razors which are known from Brailes (Warwickshire: Portable Antiquities Scheme database Finds ID: WAW-FB0A73), the Thames at Syon Reach (London: O'Connor 1980, 607, List 264, no. 3) and Great Walsingham (Norfolk: Norfolk Sites and Monuments Record: 2024/c37) have been found in graves at Bruyère-St-Job (Belgium), while razors of Havré type that were found at Court-St-Étienne also come from the Thames at Putney

Figure 2.18: Part of the Danebury hoard (Hampshire): razor found with axes nos. 1286-1289.

(London: Jockenhövel 1980b, no. 477), Cornwall and the hoard found at Leckwith (Cardiff II, Glamorgan, nos. 1292-1293) (Jockenhövel 1980, 239). Razors and swords were deposited in different contexts on the Continent and in Britain: while British razors were found in both settlement and hoard contexts and British swords were mainly deposited either broken up in hoards or complete in rivers, in the Netherlands and Belgium, both artefact types were predominantly found in graves while only a small number of razors and swords were deposited in wet contexts.

In contrast to this, we have a slightly different picture in Northern and North Eastern France. The relative chronology of the Bronze Age in this area is based on Hatt's review of Müller-Karpe's chronology for Central Europe (Müller-Karpe 1959): while Ha B1 roughly equates with Bronze Final IIIa, Ha B2/3 correlates with Bronze Final IIIb (Hatt 1961, fig. 4; Jockenhövel 1972, 103-109).

Some of the transitional hoards studied by Briard (1959) contained British Late Bronze Age material and can be used for the correlation of the metalwork industries of Northern France and Southern Britain, for example, the hoard from Gouesnach (Menez-Tosta) included, amongst a great number of French Carp's Tongue bronzes an Armorican axe, a three-ribbed axe of South Welsh/Stogursey type (Briard 1959, no. 13 and 17, 21) and a linear-facetted axe which relates to the socketed gouge from Adabrock (Isle of Lewis) and the linear-facetted axes from the Butley (Suffolk) hoards (Briard 1959, no. 11).

However, except for French hoards made up solely of Armorican type socketed axes (Briard 1965; Briard 2001), metalwork from Northern France is much less relevant than the Early Iron Age metalwork discovered in burial contexts in the Netherlands and Belgium. Recently Milcent attempted to separate the Early Iron Age of North West France and Southern Britain (his 'région medio-Atlantique', Milcent 2012, 11) into three parts: 1er Fer 1, 2 and 3 (Milcent 2012, 142-143). On the British side, Milcent's first Early Iron Age stage is characterised by the earlier Ferring (Sussex) and Llyn Fawr (Glamorgan) hoards, while the second stage is characterised by the Sompting (Sussex) and Tower Hill (Oxfordshire) hoards (Milcent 2012, 155+165). Milcent's dating is based on the typology of the associated finds, such as the iron spearhead and sword and the bronze phalerae and razors from Llyn Fawr (Glamorgan) and the bracelets in Tower

Hill, which find parallels in the above-mentioned Belgian finds from Court-St-Etienne (Brabant), Rekem (Limbourg), Alsenborn (Kreis Kaiserslautern, Germany) and Saulces-Champenoises (Ardennes) (Milcent 2012, 155+165; Plates 65, 71-76).

2.5.3. Ireland

Analogous with Britain during the Late Bronze Age/Early Iron Age transition period, we do no have any burial evidence and only very little material from settlements in Ireland. The main corpus of Irish Bronze Age metalwork comes from hoards and was studied in great detail by Eogan (1964); he also looked in turn at individual types of metalwork, for example swords (1965), pins (1974) and bronze metalwork hoards (1983). Eogan wrote a complete review of the Irish axes in the Prähistorische Bronzefunde Series (Eogan 2000). However, most of his c. 2200 axes date from the Early, Middle and earlier Late Bronze Age and only about a quarter of Late Bronze Age hoards contain socketed axes. There are only 40 depositions dating from the Irish Late Bronze Age that is the Dowris phase: 39 of those deposits include less than 3 axes and only the Dowris hoard contains 35 specimens (Eogan 1983, no. 119).

The general absence of socketed axes in Irish Late Bronze Age hoards is an important contrast with contemporary metalwork deposition in Britain. While in Ireland the number of deposited axes declines steadily, the deposition of socketed axes in British metalwork hoards sees a steady increase that climaxes in the huge British axe hoards of the Early Iron Age which on occasion include more than a hundred specimens.

Generally, Ireland's regional metalwork and the treatment of bronzes owed much to the overall Atlantic bronze working traditions. Champion argued that this pattern of regionalism with much more localised versions of tools and personal ornaments than in weapons, is not unique to Ireland, but typical of western Europe as a whole (Champion 1989, 288). It was the most characteristic trait of Atlantic Europe that most of the metalwork was deposited in hoards; burials are rare and the evidence of metalwork from settlements is restricted to a small number of damaged bronze and iron objects. It is also important to note that in most regions of the Atlantic façade metalwork

deposition took place near or in wet contexts, e.g. bogs, lakes and rivers, but hardly ever in close proximity to the oceans, i.e. the Atlantic or Irish Sea and the Channel.

Another trait that Ireland shares with Britain and most of the rest of Atlantic Europe is that whole swords were usually not part of Late Bronze Age metalwork hoards. Like British finds of Ewart Park, Thames or Gündlingen swords they were deposited in bog, river or lake contexts (Champion 1989, 289).

It is important to note, however, that unlike other regions of Atlantic Europe, Ireland was not dependent on external sources or trade and exchange of scrap metal to acquire raw materials for the production of metalwork (Northover 1982). It was largely self-sufficient, but it did not seem to supply significant quantities to Britain during the Late Bronze Age (Northover 1982, 45-92). The reason for this may possibly have been the large quantities of scrap bronze available in Southern Britain.

2.6. Absolute Chronology

Conventionally, the absolute chronology of the Bronze Age in Europe is derived from the Egyptian historical chronology via cross-dating of Egyptian objects in Minoan and Mycenaean contexts and Minoan and Mycenaean material in Egyptian contexts (Müller-Karpe 1959, 16-18). Müller-Karpe used Aegean material from Southern Italy to establish a chronology which he then correlated with finds from Northern Italy and the Alpine region, again by way of cross-dating material from closed contexts (mainly grave contexts) (Müller-Karpe 1959, 226-227). After the foundation of the Greek colonies in Italy and Southern France in the 8th century BC, Central Europe's absolute chronology could be derived directly from Greek history using pottery as well as metal vessels (Müller-Karpe 1959, 227-228).

However, since Mediterranean imports in Britain are rare, direct cross-dating proved to be difficult. To achieve dates for the absolute chronology of the British Late Bronze Age/Early Iron Age transition we will have to rely on scientific dating methods, especially radio-carbon dating. There is no dendro-chronological data available for Britain, but it may be possible to date British

contexts which include Urnfield material using dendro-chronological dates from Switzerland and France.

Dendro-chronology was used to date various Swiss lake-side settlements, for example Auvernier-Nord (Switzerland), and Rychner and his colleagues were able to gain absolute dates for Hallstatt B3 material like small vase-headed pins, early iron pins, solid-hilted swords, decorated phalerae and Urnfield knives: 878-850BC (Rychner et al. 1995, 477, Abb. 19). The most important result is that in the region of the Swiss lake-side settlements Hallstatt B1, B2 and B3 were styles rather than chronological phases, as Müller-Karpe had initially believed. However, Rychner conceded that it would be difficult to transfer his data to other regions in Europe (Rychner et al. 1995, 484, Abb. 24).

Needham argued that the main chronological basis for the Late Bronze/Early Iron transition in Britain must remain relative chronology which could only be supported by absolute dates since, as he explained further, defining the close of the Bronze Age in radio-carbon terms is difficult, because it sits on the calibration 'plateau' (800-400cal BC), leaving it uncertain as to how much after 800cal BC it continued (Needham 1996, 136).

Difficulties for radio-carbon dating British contexts which include metalwork also arise from the nature of the material evidence in Britain. There is no burial evidence and in most cases organic materials are absent from hoard contexts or cannot be securely related to certain lake and river depositions. On the other hand, while we may have several radio-carbon dates from transitional phases in settlements, usually the metalwork evidence from these sites is typologically insufficiently developed or of common, long-lived types so that the scientific dates are less useful for a finer chronology.

Needham argued that radio-carbon dates from settlements (Stackpole Warren, Glamorgan; Wallingford, Oxfordshire; Runnymede Bridge, Surrey and Potterne, Wiltshire) generally suggested that 950-750calBC was the period when developed and late Ewart Park pottery and metalwork was in circulation (Needham 1996, 136-137; Lawson 2000, 257). This would complement Rychner's Hallstatt B3 dates from the Swiss lake-side settlements. Continental evidence also suggests that the beginning of Hallstatt C lay somewhere in the 8th century since some of the latest Hallstatt B3 Swiss lake-side settlements

provided tree-ring dates reaching down to 814BC (Chindrieux-Châtillon) and the dendro-chonological date from tumulus grave 8 at Wehringen 'Hexenbergle' that included a bronze Gündlingen sword was estimated at 778+/-5BC (Pare 1996, 103, Hennig 1995, 299).

For British Early Iron Age metalwork this would mean that it began to circulate around the mid-8th century (Needham 1996, 137), while Thames type and early Gündlingen swords, as part of the Late Ewart Park metalwork assemblage, developed during ca. 800-750BC. These dates are supported by O'Connor's research (O'Connor 2007, 73). This 'Gündlingen horizon', as Pare coined it, was the transition period between Urnfield and Hallstatt cultures on the Continent (and in Britain). In Central Europe, the overlap becomes visible in some of the early Ha C wagon-graves which included almost no iron grave goods or iron vehicle fittings, but sometimes bronze Gündlingen swords and usually an Urnfield type vehicle. Examples with dendro-chronological dates are the above-mentioned tumulus 8 from Wehringen 'Hexenbergle', and also the tumulus at La-Côte-Sâint-André with an approximate date of 745-735BC (Pare 1992, 136; Hennig 1995).

Traditionally, Ewart Park metalwork was not thought to have lasted into the 8th century. However, a small number of radiocarbon dates suggest that some of the British sites may have lasted into the 8th century: Barrett argued that radiocarbon dates for the second site at Runnymede lay within the mid- to late 8th century, while two dates from the first site at Runnymede yielded dates of 2620+/-70BP (HAR-1833: 927-540cal BC at 2σ) and 800+/-70bc (HAR-1834: 1075-798cal BC at 2σ) (Barrett 1980, 307). This ties in with O'Connor's research on Llyn Fawr metalwork published in 2007 (O'Connor 2007, 71-73).

Two dates from Ewart Park contexts in Wales are earlier, however: one date range was derived from the handle of a gouge that was part of the Bodwrog (Anglesey, Wales) hoard: 2729+/-45BP (OxA-4652) which calibrates to 976-805calBC at 2σ, and the other date comes from the wooden haft of a Late Bronze Age axe from The Breiddin hillfort: 2704+/-50BP (BM798) which calibrates to 974-797cal BC at 2σ (Musson 1991, 12-13, Fig. 6, Table 1).

Needham argued that the scientific data now suggests that the transition from Ewart Park to Llyn Fawr metalwork assemblages was close to 800BC

(Needham 1997, 98). Radiocarbon dates from Llyn Fawr sites are very rare, but only recently the pyre or feasting site at Broom (Warwickshire: Watson 1999), where fragments of Class B2 cauldrons were found yielded radiocarbon dates of 2570+/-55BP (OxA-6282: 833-521cal BC at 2σ) and 2475+/-55BP (OxA-6283: 773-416cal BC at 2σ). These dates lie in the late 8th and 7th century and are complemented by radiocarbon dates derived from the haft of an early iron axe found at Buscott Lock (Oxfordshire): (OxA-6216: 2480+/-50BP) which calibrates to 776-416calBC at 2σ (Needham 1997, 98), and a date derived from charcoal that was found with a hoard of Armorican axes in Brittany which calibrated to 559+/-130BC (926-263cal BC at 2σ) Coursaget, Giot and Le Run 1961, 148).

Even though we find that the British Bronze Age-Iron Age transition lies on the radiocarbon calibration plateau and is difficult to pinpoint, there are several dates which strongly suggest that the transition period lay around 800-750BC (Needham 1996, 136). Relative chronology from Central Europe and Britain suggests that this was the phase of the transitional Gündlingen horizon, named after its pre-dominant sword type (O'Connor 2007, 71-73).

2.7. Conclusion

Until just after the turn of the century the entire corpus of British cast copper – alloy socketed axes was considered to date from the Late Bronze Age (LBA3: Ewart Park metalwork assemblage) and the Transition period (LBA4/EIA1: Llyn Fawr metalwork assemblage) (O'Connor 1980; Needham 1996), even though a large number of the axes display a very different morphology and are found in hoards of different character to those from the preceding Ewart Park metalwork assemblage. In hoards of the Ewart Park metalwork assemblage socketed axes were associated with weapons and tools, mostly damaged and broken up (Taylor 1993; Huth 1997; Turner 2010) while hoards of the (then as Transitional interpreted) Llyn Fawr period contained either a much larger number of socketed axes – often in as-cast condition – or items relating to horse riding and feasting. The metalwork was recognised as Llyn Fawr material but except for basic data-gathering and discussion of typology and dating (O'Connor 1980; Gerloff 2004; O'Connor 2007a), no further investigations specifically into Llyn

Fawr metalwork and its context has been carried out until now. Llyn Fawr metalwork features to some extent in both Cunliffe's and Sharples' work on Prehistoric Wessex, but as regional studies they do not feature a comparative analysis of other areas of Britain and the Continent (Barber 2001; Cunliffe 2005; Sharples 2010). Metalwork studies on Late Bronze Age hoards have in the past often included our Early Iron Age hoards simply because it was easier to just include them than to leave them out (O'Connor 1980; Yates and Bradley 2010). Compared to Late Bronze Age hoards, their number is small and most regional studies on Late Bronze Age metalwork would not have to include more than five or six. It took many decades before researchers made their mind up whether hoards including decorated socketed axes should be considered Late Bronze Age, Transitional or – finally – Early Iron Age in date (O'Connor 2007a; Gerloff 2010).

Recent British and Continental radio-carbon now firmly anchor the transition period between c. 800-750BC with the British Early Iron Age continuing until c. 600BC (Needham 1996, 136; O'Connor 2007, 71-74; Gerloff 2010, Milcent 2012, 181).

The dating of Continental contexts supports this date as well as a clear break between Late Bronze Age and Early Iron Age burial traditions and settlement structure. This break with the preceding Late Bronze Age period is visible in other areas of Europe, too (albeit in graves and not hoard contexts), especially in Belgium, the Netherlands and Central Europe (Pare 1987; Warmenbol 1988b; Warmenbol 1989; Pare 1991b; Hennig 1995, Milcent 2012, 155, 165+181f)).

The changes in metalwork deposition, a fresh influx of foreign bronzes and the construction of larger hillfort settlements with substantial defences in Western Central Europe and Belgium are mirrored in Britain, especially in the South (Cunliffe 2004; Sharples 2010), where we also see a drastic change in metalwork deposition at the time.

CHAPTER 3

EARLY IRON AGE SOCKETED AXES: HISTORY OF RESEARCH

3.1. Introduction

This thesis looks at socketed axes that were discovered in Early Iron Age contexts (hoards and settlements) and single, unassociated finds that are typologically related to these. This chapter will therefore will look briefly at each axe type, introduce it and present a short summary of previous research. It will also discuss previous research into the use and function of socketed axes and provide an overall summary thereof.

3.2. The Sompting Problem

Sompting type axes are the most characteristic Early Iron Age axe type. Their group stands in contrast to the other types discussed below. Socketed axes of Sompting type are the largest and to our modern eyes, most beautifully crafted specimens of the entire corpus. While socketed axes of Blandford, Portland and East Rudham types (see below) are small, light, thinly cast and have a high tin-content, the axes described as 'Sompting' are large and heavy.

Figure 3.1: Socketed axe of Sompting type, Kingston variant from Broughton (North Yorkshire: no. 1221)

It was this group of socketed axes which had not previously been looked at and defined that caught Burgess'

attention in 1971. In his original definition of the 'Sompting' type, Burgess described them as having fairly straight sides, which diverge to an unexpanded, or moderately expanded blade which is often straight-edged (Burgess 1971, 267). He suggests further that their profile is heavy and pronounced, with a large mouth moulding which is generally biconical in profile (Burgess 1971, 267).

Figure 3.2: Part of the Sompting hoard (Sussex): socketed axes of Sompting and East Rudham/Linear-decorated types (nos. 1009-1025)

The examples of socketed axes discussed in his paper include three single finds from Yorkshire (Seamer Carr, Cayton Carr and Broughton: nos. 1236, 1223+1221, fig. 3.1; Plates 103+105) and the fifteen heavier axes from the Sompting Hoard (East Sussex, nos. 1011-1025, fig. 3.2; Plates 75-77), thus excluding the two linear-faceted axes that were also part of the hoard (nos. 1009-1010; Curwen 1948, pl. XX, 5+6). Although Burgess includes a map and a general description of Sompting type axes, he does not directly name any other specimens apart from those 18 examples from Yorkshire (3) and the Sompting Hoard (15) mentioned above.

In the decades following Burgess' publication some confusion arose as to *what* exactly Sompting type axes are. According to Burgess' definition of the type socketed axes of the Sompting Type should have,

> "…loops [that] tend to be quite small but broad, and often have a distinctive 'spurred' base which is peculiar to this socketed axe form.

> The socket is sometimes square, but is more often sub-rectangular and disposed in a distinctive 'back-to-front' plan, with the long axis at right angles to the cutting edge, instead of parallel to it in normal socketed axe fashion. This results from the axe being relatively narrow of face and broad at the sides. We can call this form of socketed axe after the hoard from Sompting, Sussex, in which plain, simple ribbed and decorated versions are well represented." (Burgess 1971, 268)

However, when looking back at the small number of socketed axes Burgess included in his discussion, and the numerous examples in museum collections and recent discoveries of Sompting axes may be more variable.

Even Burgess' original account on Sompting type axes is problematic because his definition only describes three examples from Yorkshire (nos. 1236, 1223+1221) and axes nos. 1011-1014+1025 from the Sompting hoard (Curwen 1948, pl. XX, nos. 1-4,+7). However, the remaining axes from Sompting do not show the fairly straight, almost parallel sides, and in contrast to Burgess' definition which requires that Sompting type axes should have an "unexpanded, or moderately expanded blade which is often straight-edged", their cutting edges are widely splayed and curved.

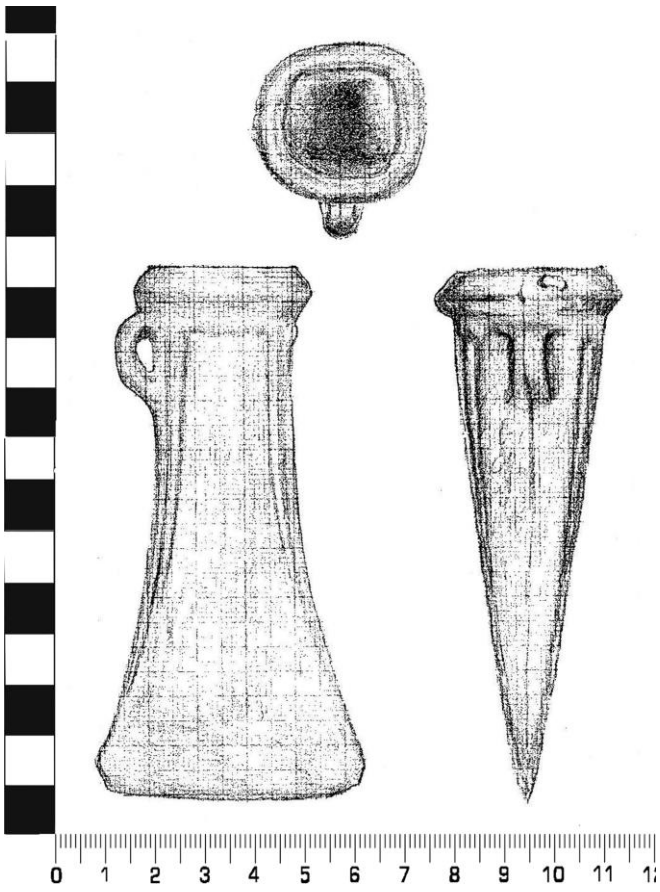


Figure 3.3: Socketed axe of Transitional type from Gembling (Yorkshire: no. 1226)

This thesis presents a much larger corpus of 125 single finds and 123 associated finds of so-called Sompting type

axes and it is difficult to continue to take Burgess' definition literally, especially since the range of Sompting type axes now seems to include all Transitional and Early Iron Age socketed axes which are not classed as Armorican or linear-decorated/-ornamented (every plain or decorated socketed axe between 200-500g and a length between 11-15cm and not of the South-Eastern English socketed axe type).

In 1981, Burgess and Schmidt chose to study the axes of Northern England and Scotland. Schmidt and Burgess' corpus of over 1715 provenanced Bronze Age axes included 70 specimens of Sompting type (Schmidt and Burgess 1981, 241f) which were subdivided into straight-forward Sompting type axes, Sompting axes of Roseberry Topping variant and Sompting axes of Gembling variant (Schmidt and Burgess 1981, 244f; 246f). While their corpus of Sompting type axes is fairly homogenous (expect for no. 1599 which is Transitional with its short ribs and pellets), their Roseberry Topping and Gembling variants are problematic. Even though some specimens are of Sompting type (for example Schmidt and Burgess 1981, nos. 1621-4+1627-1629), many of their axes date from the Late Bronze Age and are related to ribbed South Eastern axes (for example Schmidt and Burgess 1981, nos. 1604+1612-1620). The three socketed axes of Gembling variant (Schmidt and Burgess 1981, 1643-1645) appear much more closely related to Late Bronze Age facetted and linear-facetted axes, and possibly Early Iron Age linear-decorated axes, but certainly not Sompting type axes (fig. 3.3).

The root of the Sompting axe problem lay in the small corpus of Sompting axes Burgess looked at in 1971 but also in the specific region that Schmidt and Burgess chose for their study in 1981. Sompting type axes are much more common in the Midlands, East Anglia and in the Thames Valley areas. These are areas that Schmidt and Burgess did not consider for their 1981 catalogue. Furthermore, for their typological approach Schmidt and Burgess concentrated on decoration and size of the axes but were not quite strict enough, even though Burgess himself had warned that there does not seem to be a clear-cut definition of the various decorative styles and sub-styles (Burgess 1971, 267).

The wealth of patterns both simple and more and less elaborate is striking and cannot be matched on axes of the Ewart Park period. Most of the patterns are unique so that it proves difficult to group them with others.

In addition to their decoration other criteria should be considered: weight and shape, length, width of blade and their mouth shape which can then in turn be correlated with form and decoration in order to see the relation between shape/form and decoration which has hitherto been missed.

Over the past four decades the term *Sompting axe* has become so accepted and integrated into Late Bronze/Early Iron Age archaeology that at the same time it has also become inflexible and meaningless.

Taking into account both the general diversity of 'Sompting axes' described in more detail in Chapter 6 and the deeply rooted 'Sompting axe' concept, it is best applied to the large, heavy axes of the Early Iron Age. In order to clarify the differences among Sompting axes, the use of four different 'variants' of the Sompting axe will be suggested: variants Kingston, Tower Hill, Figheldean Down and Cardiff II (see Chapter 6).

3.3. Linear-decorated axes and axes of East Rudham, Portland and Blandford types

The terms "Linear-Ornamented" and "Linear-Faceted" were introduced in the 1960s and 1970s to describe a transitional axe type (Butler 1963; Moore and Rowlands 1972). If Sompting type axes were found at one end of the scale of size and weight, then linear-ornamented or linear-faceted axes could be found at the other. This is because these axes are

Figure 3.4: Socketed axe of Linear-decorated type from the Fens near Ely (Cambridgeshire, no. 88)

small, thinly cast and very brittle.

Butler (1963), Moore and Rowlands (1972, 29, fig. 2) and O'Connor (1980, 231-3) set them apart from Sompting axes and recognised that these were a transitional type, but none of them felt that a sub-division was possible, grouping material from East Anglia and Southern England together. Since much new material has been recovered over the past two decades from Eastern and Southern Britain this thesis will divide them into five separate groups (figs. 3.4 and 3.6). For instance, we can see now that linear-ornamented or linear-faceted axes found in Norfolk can be subdivided into two local East Anglian types. Firstly, there is the heavier and sturdier Linear-Decorated type, as identified by Moore and Rowland (1972, 30). Secondly, a group of very similar-looking axes can be defined because of the differences in weight, wall thickness and metallurgy. The largest hoard of this subtype was found near East Rudham, Norfolk (nos. 845-886), and there are also a few smaller hoards, also from Norfolk (for example from Cringleford, Watton and Syderstone, nos. 842-844, 881-888 and 889-895). However, the proposed type name for this distinctive subtype is East Rudham type, after the biggest hoard containing these axes (Norfolk, nos. 845-886). It is noteworthy that neither East Rudham type nor the heavier Linear-Decorated axes have been found in Late Bronze Age hoards associated with Ewart Park metalwork. Furthermore, it must be noted that they were only found in East Anglia with East Rudham type axes being a solely Norfolk-based type.

Figure 3.5: Socketed axe of East Rudham type from the Watton hoard (Norfolk, no. 895)

Another new type is named after one of the smaller hoards from Dorset, Portland type. Similar to axes of East Rudham type, Portland type axes form an extremely homogenous group amongst the axe types of the Earliest Iron Age. They are lighter and smaller than any of the other axes, but like East Rudham axes, were made of a copper-alloy with a very high tin content. They were very thinly cast, brittle and would not make very useful tools. Also very much like East Rudham axes, they were found in larger hoards sometimes associated with another subtype of linear-ornamented axes, Blandford type (e.g. Salisbury/Netherhampton, Wiltshire: nos. 1061-1202; Langton Matravers, Eggardon Hill, Portland, Dorset: nos. 226-598, 219-225+599-606; and Blandford, Dorset: no. 211).

Figure 3.6: Socketed axes of Portland, Blandford, Hindon and East Rudham types (no. 444: Langton Matravers, Dorset; no. 211: Blandford, Dorset; no. 1361: Hindon, Wiltshire; no. 842: Cringleford, Norfolk)

Some Portland axes are faceted, but these few examples are exceptions to the rule and do not justify the name Linear-Faceted axes for the entire group. The main characteristic is their uniform decoration with one, two or three (rarely more) ribs terminating in small pellets which makes them unique and clearly sets them apart from their East Anglian cousins, East-Rudham and Linear-Decorated axes which are decorated with side ribs (see Chapter 6).

Axes of the last new type, Hindon, have so far only been discovered at Hindon (Wiltshire, nos. 1354-1387). Hindon type axes are not faceted, either, but have a square or rectangular cross-section and are undecorated.

3.4. Armorican Axes

The group of Armorican axes is well-known (fig. 3.7). It is a homogenous group, which probably originated in North-Western France, thus being called Armorican Axes or Breton Axes. In 1965, Briard described them and attempted to define sub-types (Briard 1965, 247-50). Although predominantly found in North-Western France, a number of hoards come from Northern France, Belgium, the Netherlands and Britain (e.g. Tintern, Glamorgan: nos. 1333-1334; Nether Wallop and a hoard from near Southampton, both Hampshire: nos. 690-702+705-772; O'Connor 1980, 235). The numeral difference of axes in those axe hoards is remarkable: from Brittany over 220 hoards with over 22,500 axes are known (O'Connor 1980, 235) while hoards from outside of that area are much smaller.

Figure 3.7: Armorican axe from the New Forest (Hampshire: no. 774)

Similar to East Rudham type and Portland type axes, Armorican axes are extremely uniform in shape, even though they occur in varying sizes (from 5.0-12.0cm, O'Connor 1980, 235). However, unlike socketed axes of East Rudham and Portland types which are made from a copper-alloy that is rich in tin, Armorican Type axes were made from a leaded copper-alloy (Pearce 1983, 120-121, 253; Northover 1987, 36-37).

3.5. Iron socketed axes

So far, only 24 iron socketed axes have been discovered in England (12), Scotland (5) and Wales (4). Three specimens are from the British Isles, but unprovenanced. Iron socketed axes were first published and discussed by Rainbow (1928, 170-175) and later reviewed and updated by Manning and

Saunders (1972, 276-292). Manning and Saunders listed only 16 provenanced iron axes, but one specimen that was recently discovered in the Thames at Buscot, Oxfordshire, has been added (Barclay *et al*. 1994, 417-419) as well as three very recent finds from a so far unpublished site at Penllyn Moor, Glamorgan (A. Gwilt, *pers. comm.* and Gwilt 2004). Of these 24 axes, 22 are looped and 2 unlooped.

Dating of these objects is problematic because many are unprovenanced (O'Connor 1980, 237). However, it is known that some at least come from Late Bronze Age/Early Iron Age transitional settlements, for example from Cold Kitchen Hill (Wiltshire, no. 1402) and Traprain Law (Midlothian: no. 1404). Moreover, O'Connor (1980, 237) suggests the context of iron axes from the Thames may provide a clue to when they were made and deposited.

The 24 specimens (looped and unlooped) are similar and may therefore be grouped together. All of them are sufficiently similar to Late Bronze Age socketed axes in size and shape to suggest that they have been copied from those. However, iron could not be melted down and cast like bronze; instead, the iron axes were probably forged from several bands of wrought iron (for example no. 1403: Rahoy, Argyll; Manning and Saunders 1972, 279). The loop was most probably made of an extra strip of iron that was then welded onto the body of the axe. None of the axes bears a decoration perhaps indicating that at this early stage of iron-working, and without the ability to cast in moulds, such decoration was impossible.

Figure 3.8: Socketed iron axe from Traprain Law (Midlothian: no. 1404)

3.6. A note on the use and function of socketed axes

3.6.1. Introduction

Early Iron Age socketed axes are very diverse in size, weight, material, surface colour and blade finish. These differences suggest that the different types of axes may have had different uses or functions. Socketed axes of different types may therefore have been made for different purposes.

This is why this second part of the chapter will look into past research into the use and function of objects in general and the use and function of socketed axes specifically.

An object's *use* and *function* describe why an object was made but there is a subtle difference in the two physiognomies: whilst *use* describes something active and practical, *function* often connotes an object's purpose or meaning.

3.6.2. Use: Socketed axes as tools

The main purpose of a Late Bronze Age socketed axe seems to have been chopping wood (Roberts and Ottaway 2003). A certain number of socketed axes were most certainly used for woodwork as recent evidence found on wooden boats from Must Farm (Cambridgeshire) and timber posts and alignments at Flag Fen (Peterborough) shows (Gibson *et al* 2012, 12-19; Bamforth 2010, 76-77). In both cases, tool mark analysis suggests that socketed axes were used in their construction and possibly decoration. In case of the Flag Fen post alignment Bamforth was even able to narrow down the type of axe used to the Late Bronze Age Yorkshire type (Bamforth 2010, 77).

The majority of Early Iron Age socketed axes also showed 'some signs of use' or 'light wear' rather than 'definite signs of use' (see Chapter 4). However, Armorican axes and most axes of East Rudham, Hindon, Blandford and Portland types displayed no signs of wear at all. Furthermore, there was never any evidence inside their sockets suggesting a haft or handle had ever been inserted.

In order to use a socketed axe with some force a handle was certainly needed. Older finds of Early Iron Age socketed axes sometimes retain calcified fragments of wood in their sockets (for example no. 91: Fen Drayton, Cambridgeshire; no. 903: Hockwold, Norfolk, fig. 3.9, Plate 46; no. 995: River Thames at Richmond, Plate 71, and nos. 1275-1279: Poolewe, Ross and Cromarty, Plates 113-115). Normally, this is reconstructed as a simple elbow haft as seen on the axe from Ely District, Cambridgeshire (no. 94, fig. 3.10, Plate 11). The axes' small side loop is normally reconstructed as facing the haft serving as an anchor for a piece of string or leather that would have secured the axehead to the haft. However, a recent discovery from Surrey suggests that other methods were used: At Shepperton Ranges a composite wooden two-part haft (haft and cross member or haft head) were discovered which, in effect, created a shaft hole axe (no. 1408; Needham 2012, 46-48).

Figure 3.9: Socketed axe of Linear-decorated type with remains of wood inside the socket from Hockwold (Norfolk: no. 903)

Nevertheless, axeheads of certain types were never meant to be hafted. These are Armorican axes and socketed axes of Sompting type, Figheldean Down variant, Portland, East Rudham, Blandford and Hindon type axes. This is evidenced by specimens that still retain their clay core inside their sockets, a characteristic normally seen in Armorican axes. Examples for Armorican axes with intact clay cores come from Tintern, Monmouthshire (nos. 1333-1334, Plates 132-133), Carn Brea, Cornwall (no. 104, Plate 15) and from Magdalen Bridge, Oxford (no. 959, Plate 62). Intact clay cores can also be found on one of

Figure 3.10: Socketed axe of Sompting type, Cardiff II variant with reconstructed wooden hilt, from the Ely District (Cambridgeshire: no. 94)

the smaller, thinly cast Early Iron Age axe types, Hindon type (for example nos.1358, 1366, 1373 and 1373). However, clay cores are not common in types related to Hindon type that is Portland, Blandford and East Rudham types.

In a few rare cases axeheads were rendered useless by jamming smaller pieces of broken-up metalwork inside their sockets, as evidenced on two axes from the hoard found at Figheldean Down, Wiltshire (nos. 1030 and 1040, fig. 3.11, Plates 81+83) and another from the Portland Hoard, Dorset (no. 600, Plate 27). This is a rare occurrence in Early Iron Age axes though especially those that show any evidence of use and re-sharpening such as socketed axes of Sompting type, Kingston and Cardiff II variants.

There are cases where a miscast axehead was prepared for use (for example no. 930: Shelford, Nottinghamshire). The most striking example is a lower half of an axe that formed part of hoard from Poolewe, Ross and Cromarty (no. 1277, Plates 113-115). This specimen had no socket and no loop, but its casting seams had been removed and it had a widely splayed, sharpened

Figure 3.11: Two socketed axes of Sompting type, Figheldean Down variant with socket axe fragments jammed inside their sockets (nos. 1030+1040: part of the Figheldean Down hoard, Wiltshire)

blade. These two contrasting examples of one extremely miscast yet used axe and one complete yet unused axe suggest that the answer to the interpretation of their actual *use* lay within their individual makes and metallurgy rather than the fact that they were axe-shaped objects and therefore automatically tools for chopping wood or, possibly, weapons for combat.

3.6.3. Use: Socketed axes as weapons in combat

Roberts and Ottaway (2003) found limited evidence for metal-on-metal impact on two of the axes from South East Scotland, suggesting that socketed axes may have been used in combat, although this is understudied (Bridgford 2000, 154; Roberts and Ottaway 2003, 132). The use for socketed axes as weapons rather than tools has also been suggested for some Irish metalwork contexts, where a socketed axe was found deposited together with a sword and a spearhead, possibly making up a warrior's kit (Cooney 2004, 40).

Socketed axes are generally renowned for their more traditional use as woodworking tools rather than as a weapon because swords are considered to be the foremost weapon for attack in the Late Bronze Age (Bridgford 2000).

However, there is no reason to discount the possibility that socketed axes were used in warfare, possibly only by certain groups. Indeed, the larger, heavier axes of Sompting type would have made very efficient weapons, their small number suggesting that they were made for and used by only a certain group of people. We are unfortunately lacking Early Iron Age human remains and pathological evidence with combat wounds to support this theory and there has been little discussion or experimental archaeology to explore this topic. As James argues, in the British Early Iron Age warfare and other forms of conflict and violence remain conspicuous by their virtual absence from discourse (James 2007, 160). However, axes and axe type weapons were used in combat in the early medieval ages in France and Britain, as suggested by analyses of Anglo-Saxon grave goods and skeletal evidence (Härke 1989, 52-56; Wenham 1989, 130, figs. 8.11+8.13-8.16; Härke 1992, 87-88, 105-106). Thus, there is little reason to discount the possibility of their use in warfare or territorial and other disputes in the Early Iron Age. Larger Sompting type axes may have been used as tools or weapons but the smaller Armorican axes and axes of Portland, East Rudham, Hindon and Blandford types' different morphology suggests other uses.

3.6.4. Use: Socketed axes as ingots

The axe from Figheldean Down briefly mentioned above, with a separate socketed axe fragment jammed in its socket (no. 1040, fig. 3.11, Plates 81+83), was found with others, equally unused: they displayed untrimmed casting seams and extremely narrow, unsharpened blades (Figheldean Down, Wiltshire, nos. 1029-1050). Their metallurgical analysis shows that they contained an unusually high percentage of tin and lead (in some cases over 20%) which would make them extremely difficult to work and shape after casting (Needham and Rohl 1998, nos. 400-410; Northover 2003, 221-223). With their long bodies and comparatively narrow blades, axes of Figheldean Down variant would not have made useful and efficient tools for woodworking. In contrast socketed axes with

a shorter body and expanded, wider and curved blade like axes of Sompting type, Tower Hill and Kingston variants would have provided a much broader

cutting edge and better balance for chopping trees and trimming trunks and branches. The other axes of Sompting type, Figheldean Down variant, were found at Mylor, Cornwall: they were equally unworked, wedge-shaped and had very narrow blades and parallel sides. They were found tightly packed in a clay vessel, blades down, and they were most certainly not hafted at time of deposition – there would have been no room for 33 complete elbow hafts in or above their container (fig. 3.12). In terms of shape, size and metallurgy, axes of Sompting type, Figheldean Down variant are more closely related to Armorican

Figure 3.12: Mylor hoard in situ, during excavation (Cornwall, nos. 147-179): tightly packed axes within earthenware pot clearly visible (image courtesy of Anna Tyacke, Cornwall FLO/PAS)

axes than other Sompting axes.

Armorican axes are generally considered the archetype of metal *hache monnaie* or axe ingots, characterised by heavy weight, extremely narrow blades and parallel sides (Briard 1965; Bradley 1990, 119). They often retain their clay core (fig. 3.13). However, whilst their metallurgy suggests a high lead content, metallurgical analyses of British axes of Figheldean Down variant show that

they were made from a high-tin/high-lead copper-alloy, possibly not surprising with Cornwall being one of the most important sources for the mining of tin in the ancient world (Pearce 1983, 120). None of these axes showed any signs of wear or re-sharpening and so were not used for woodwork but possibly as standard units of raw material for the metal trade (Bradley 1990, 120).

Figure 3.13: View inside an Armorican type axe with its clay core clearly visible (no. 1207: East Kennet, Wiltshire; the other axes are nos. 1204 and 1216 from Chilton Foliet and Shalbourne, also Wiltshire)

Similar to Armorican type axes, axe of Portland and Blandford types were considered to be ingots early on. In 1983, Pearce argued that socketed axes of Portland type represented the first convincing tin ingots of the Late Bronze Age, and should be interpreted as part of metal trading networks, rather than usable tools (Pearce 1983, 120-121; 253). She suggested that while Armorican axes were a 'lead ingot', Portland axes could be seen as 'tin ingots'. The high tin content of Portland type axes has been confirmed by metallographic analysis which suggests a tin content of between 11.45-22.96% and a lead content of between 7.3-11.6% (Northover 1987, 36-37). Northover also argues that inverse

segregation gives many a hard silvery surface, enriched in tin (Northover 1988, 79). Portland axes stand out not only because of their high tin content, but also because they are small compared to other axes (ca. 9cm), clearly wedge-shaped, thin-walled and usually have a less than 5mm thick cutting edge (which leaves them useless as woodworking tools or weapons).

Bradley suggests that axes such as these possessed a dual role, serving both as everyday tools and as standard units of metal (Bradley 1990, 119). However, in the case of Portland, Armorican and Figheldean Down axes this seems unlikely. Even though they were cast in the shape of an everyday tool for woodwork or, possibly, warfare, the lack of wear suggests that they were not used for chopping or trimming. While Armorican and Figheldean Down axes are normally heavy, sparsely decorated or uniformly plain, they differ greatly from the other axes types that have been identified as axe-shaped ingots in the past: Blandford and Portland types (Pearce 1983, 120-121; 253).

It has been suggested that the mass production of morphologically similar, functionally useless socketed axes of Portland type – as opposed to the useful tools for everyday manual tasks, led to suggestions regarding their role in trade or even as a proto-currency, similar to that of Armorican axes (Pearce 1983, 120-121; Briard 1987, Roberts *et al* 2015, 14-15). There is no doubt that bronze objects were also widely tradable ingots that were melted down to form locally desirable forms and that this process is crucial to understanding cross channel relations during the Later Bronze and Early Iron Ages (O'Connor 1980; Needham *et al* 2013). However, Roberts argues that the socketed axes of Portland type found at Langton Matravers (Dorset, nos. 226-598) do not seem to be obvious candidates for trade or currency. They were discovered in a very small, well-defined 30m area and still retained their clay cores. Their very high lead and tin content would have lowered the temperature of their melting point to the point that pure copper would have been needed to produce a more usable alloy (Roberts *et al* 2015, 15). Existing theories suggest that the dramatic reduction in the quantity of bronze being recovered from the peak during the Ewart Park metalwork phase (c. 1000-800 BC) through to the Llyn Fawr metalwork phase (c. 800-600 BC) and then the Early Iron Age (600-400 BC) should be interpreted in terms of a collapse in value of bronze. This

perspective has traditionally been based around the adoption of iron and the subsequent economic dumping of bronze as a collapsed commodity (e.g. Burgess 1979) but has recently been revised with the proposal that bronze lost its social or ritual value, with the consequence that far fewer bronze objects were subject to votive deposition after 800BC (Needham 2007)

Light-weight, thinly-cast socketed axes of Portland, Blandford, Hindon and East Rudham types are characteristically cast with a high-tin content and have a very shiny silvery surface, probably due to an enrichment in eutectoid during casting by the so called tin-sweat phenomenon (Northover 1987, 35-36; nos. 11.33-11.38; Roberts *et al* 2015). Some specimens recently found at Hindon, Wiltshire (nos. 1358-1387) and Langton Matravers, Dorset (nos. 226-598) still show patches of bright silver tin lustre on their surfaces, even though many examples of these types have lost the rich silver sheen due to corrosion products that have accumulated on their surfaces (fig. 3.6). No metallurgical analysis has so far been carried out on any axes of Hindon, Blandford and East Rudham types, but their similar size, weight, shape and surface sheen suggest that their metallurgy may be similar to that of the Portland axes from the Salisbury hoard (Wiltshire) and Langton Matravers (Dorset) (Northover 1987, nos. 11.32-11.38; Hook, Meeks and Mongiatti in Roberts *et al* 2015). None of these light-weight brittle axes display any evidence for wear and re-sharpening, except for one

Figure 3.14: Four axes from the Portland hoard (Dorset, from left to right, nos. 603, 604, 606 and 605)

specimen from Portland (Dorset: no. 606, fig. 3.15; Plates 28-29) which was sharpened by the finder after discovery.

Thus, akin to the lack of evidence for use and wear on Armorican axes and axes of Variant Figheldean Down, the lack of use and wear demonstrated on Portland, East Rudham, Blandford and Hindon axes suggests that their actual *use* was not for chopping or trimming wood let alone warfare.

Even though the smaller, light-weight axes had a much more widely splayed cutting edge, they could have not been prepared for use and sharpened only with great difficulty. Their constitution and metallurgy makes them very brittle and they shattered easily on impact as indeed the many glass-like axe splinter fragments found in association with complete axes in the hoards from Langton Matravers, Dorset (nos. 226-598), and East Rudham (Norfolk, nos. 845-886) are testaments to their fragility (fig. 3.15).

Figure 3.15: Complete, fragmented axes and axe fragments/splinters from the East Rudham hoard (Norfolk, nos. 845-886, complete axes: nos. 854, 855+865)

Pearce's suggestion that they were tin ingots and related to Armorican axes seems highly unlikely (Pearce 1983, 120-121; 253). While Armorican axes have

an extremely wide distribution and are spread over large areas of Northern France and Southern England and Wales, Portland and Blandford axes were almost exclusively found in Dorset and East Rudham axes were only found in Norfolk. Axes of Hindon type were only discovered at one site. These very individual regional distributions suggest a very regional use rather than a wider-reaching trade network in which these axes played the role of tin ingots. If these axe types were tin ingots intended for trade, one might expect a similar, much wider distribution as well as more axes of these types closer to the sources of tin mining, in Cornwall, Devon and Somerset. However, their geography and metallurgy suggests that they were made for a different use.

3.6.5. Use: Socketed axes as utensils in performance and public display

Brück argues that many objects have both an expressive and a practical aspect meaning that an object's use and its appearance during handling was important – indeed, looks may have defined its use to some extent (Brück 2007, 282). Hurcombe agrees, suggesting that some objects that look like 'tools' to us were tools but not as we understand them (Hurcombe 2007, 5). This indicates that the very idea of a tool depends on context and is society-specific. It may then be suggested that, if our small brittle socketed axes of Portland, Blandford, East Rudham and Hindon types were not woodworking tools in the traditional sense and they were not used as ingots attested by their limited distribution and metallurgy, they very probably had a different significance. The metallurgical analysis of the Portland axes from the hoards found at Salisbury (Wiltshire) and Langton Matravers (Dorset) demonstrated that the tin content of the alloy lay between 16-23% (Northover 1987, nos. 11.32-11.38; Hook, Meeks and Mongiatti in Roberts *et al* 2015). Thus, the axes' metallurgy is very similar to that of modern artefacts made from *bell metal* which is characterised by a 4:1 ratio of copper and tin and also produces brittle metal artefacts with a silvery surface sheen. However, artefacts made from bell metal are renowned for their superior sound quality (hence the name) and although difficult to prove it is possible that the high tin content of Early Iron Age socketed axes of Portland and related types means that they were partly produced for their sonorous qualities and looks rather than for use in trade or woodwork. Having been used

in an entirely different manner and in an entirely different strongly suggests that socketed axes of Portland, East Rudham, Hindon and Blandford types had a very different function to that of other Early Iron age socketed axes.

3.6.6. Function

Function is closely related to *use,* but while *use* has a more practical aspect to it and is demonstrated by marks of wear on the surface of an axe and along its blade, an axe's ultimate *function* may not only be revealed by its wear but also by its size, weight, shape, decoration and surface colour. An artefact's *function* is almost predetermined by its type and its position within its archaeological classification and it has been suggested that even calling an object and 'axe' is to assume that people of the past saw it in the same light as we do today: as a wood working tool (Hodder and Hutson 2003, 27). To discover the *function* of an object is one of the basic aims of archaeology. Knowledge of an artefact's function enables us to approach its creator and/or user, and create ideas about the society to which it belongs (Doumas 1998, 157). Contrary to the great variation in individual size, weight and shape of Early Iron Age socketed axes strongly suggests they were not considered a single set of objects but were perceived and functioned in different ways. These objects played different roles in different contexts, not only as tools but also as weapons in combat or display, ingots in trade or as tools or ornaments in or for certain performances. This much greater variety of functions stands in stark contrast to the role that socketed axes played in the Late Bronze Age which was almost exclusively that of tools for woodwork, as suggested by recent evidence seen on the boats found at Must Farm (Cambridgeshire), the post alignments at Flag Fen and experimental archaeology (Roberts and Ottaway 2003; Bamforth 2010; Gibson, *et al* 2012).

Socketed axes are seen as an integral part of the Late Bronze Age and Early Iron Age woodworking kit. Turner suggested that in socketed axes, a variety of form may have also meant a variety of function (Turner 2010, 98). She argues that, in the Late Bronze Age, socketed axes may have been viewed as the primary tool whose use precluded any other activity. They were used for felling trees and thus helped in creating open spaces for farmland and pasture, the

timber was used to build houses, palisades, boats, carts, platforms, enclosures for stock control and many other structures that were an essential part of Late Bronze and Early Iron Age life (Roberts and Ottaway 2003, 134; Cunliffe 2004, 68-69; Gibson *et al* 2012). Turner adds that the wide spectrum of uses could have also included the killing of enemies in battle or cattle for food, an idea that James and Sharples have previously not considered as a possibility (Sharples 1991, 82-84; James 2007, 163; Turner 2010, 98).

Turner's research shows that socketed axes played an important part in processes of creating and improving the means of how and where people lived, but in addition, socketed axes may have also helped in establishing, securing and protecting the new farmland, houses and animal enclosures. Early Iron Age socketed axes of the smaller, thin-walled Portland, East Rudham, Hindon and Blandford types would not be suitable for defence, but the larger, heavier axes of Sompting type, Kingston and Tower Hill variants with their long, crescent-shaped blades certainly were.

Only limited numbers of contemporary weapons such as spearheads and swords were recovered from British Early Iron Age contexts and their limited geographical distribution suggests swords and spearheads may not have been the first choice of weapon for combat (Burgess and Colquhoun 1988, Plates 132-135; Ehrenberg 1977). Contemporary assemblages from Early Iron Age Hallstatt burial contexts in Belgium and Southern Germany suggest a shift from a mainly sword-bearing society to one that favoured daggers and spearheads (Mariën 1958, 124-125; Kossack 1959, 23-24). There are no British burial contexts of either Late Bronze Age or Early Iron Age date indicating preferred weapons or weapon combinations, but in terms of pure numbers of material evidence socketed axes of Sompting type outnumber Early Iron Age swords by more than 5:1. In the British Late Bronze Age, swords were a much more common feature and their distribution much more wide-spread, both as single finds and in hoard contexts (Colquhoun and Burgess 1988, Plates 127-131). The small number of mostly unassociated British Early Iron Age swords on the other hand strongly suggests that they played a very different and much less prolific role in combat Early Iron Age socketed axes, however, are almost omnipresent in all parts of Britain and their various uses as ingots, ceremonial

or symbolic artefacts for display or standardised wood-working tools need not necessarily exclude their use as very efficient weapons.

Figure 3.16: The Tower Hill hoard (Oxfordshire, nos. 932-952)

Cutting edges of Sompting type axes (mainly those of Kingston, Tower Hill and Cardiff II variants) show evidence for wear and resharpening mainly in the original shaping of the blade, damage along the cutting edge and striations running parallel to it (see Chapter 5). These marks indicate that most Sompting type axes enjoyed a prolonged life as a chopping or trimming tool and also, that they were re-sharpened on a regular basis (as use commanded). However, *what* exactly was chopped with them is another question entirely. As on Late Bronze Age axe blades, there is not normally much evidence left on the blade of Early Iron Age axes that would indicate the type of object that was chopped *with* it or alternatively, the type of object that it was chopped *by* (Roberts and Ottaway 2003, 127-133). The different emphasis means to highlight that, depending on the type of event, socketed axes could take on either an active or a passive role. For example, as a woodworking tool or a combat weapon they

would have played a very active part in the event of chopping wood or chopping an adversary, while they would have taken on a more passive role as ingots in trade or symbols in a display. It is important to note here that this difference in function is not automatically accompanied by a difference in significance. Socketed axes of Sompting type used in combat could have certainly been of equal significance to socketed axes of Portland type in the context of ritual, show or display, even though the contexts and functions performed could not have been more different.

The possible role of Early Iron Age Sompting type axes in combat must be further explored, even though evidence is sparse (Bridgford 2000; Roberts and Ottaway 2003). The size and shape of Early Iron Age Sompting type axes greatly differed from the general size and shape of Late Bronze Age socketed axes: axes of Sompting type, especially those of Tower Hill and Kingston variants are much larger and heavier than their Early Iron Age contemporaries and their Late Bronze Age forerunners. They were cast with widely expanded blades, as seen on the unfinished axes from Tower Hill (Oxfordshire, nos. 932-953, fig. 3.16; esp. Plates 57-58). Furthermore, axes of Tower Hill and Kingston types were often very elaborately and uniquely decorated giving them a much more individual appearance sharply contrasting the plain and simply ribbed Late Bronze Age axes which may have displayed regional affinities in their ribbed decoration but certainly not individuality.

3.6.7. Decoration

The decoration on socketed axes may have played a role in relation to their function. This research suggests that the multitude of different varieties of the rib-and-pellet pattern is the variation of a theme that originated on British Late Bronze Age axes which displayed a much simpler decoration composed of short ribs ending in drop-like pellets, such as can be seen on the rib-and-pellet decorated axe from the hoard from Feltwell Fen (Cambridgeshire, British Museum Accession Number: WG2078, fig. 3.17). Huth suggested that the rib-and-pellet ornament, especially in relation to how socketed axes were often found in hoards, were marks of individual founders or possibly sacred symbols with a protective function (Huth 2000, 190). For axes of the smaller types –

Portland, Blandford, Hindon and East Rudham – that may be true, especially because all of them have a very region-specific distribution (see Chapter 7), but all axes of Sompting type, Kingston and Cardiff II variants display a very unique shape or pattern which suggests an equally large number of craftsmen. Furthermore, if each craftsman had his very own specific design, the many different designs would suggest that a large number of founders cast only one axe each, while a much smaller number of bronze workers were very busy making the great number of plain ribbed or rib-and-pellet decorated axes.

Figure 3.17: Late Bronze Age hoard from Feltwell Fen (Cambridgeshire: British Museum Acc. Nos. WG2078-2096): Late Bronze Age socketed axe with rib-and-pellet decoration (upper left, first axe)

Huth's second suggestion that the rib-and-pellet ornament had a protective function or was used as a sacred symbol may be closer to the truth for Early Iron Age socketed axes of Sompting type, Kingston and Tower Hill variants (Huth 2000, 190). These are the only two groups of Early Iron Age axes that display a wide range of different, often unique variations of the basic rib-and-pellet theme and if it is unlikely that the subtle differences in ornament indicated

different metalworkers, the variety in style may indicate individual owners who requested, though keeping the style similar in general, individual ornaments on their axes (fig. 3.18). This would suggest that the decoration was meaningful to the axe's owner and those who saw it in use.

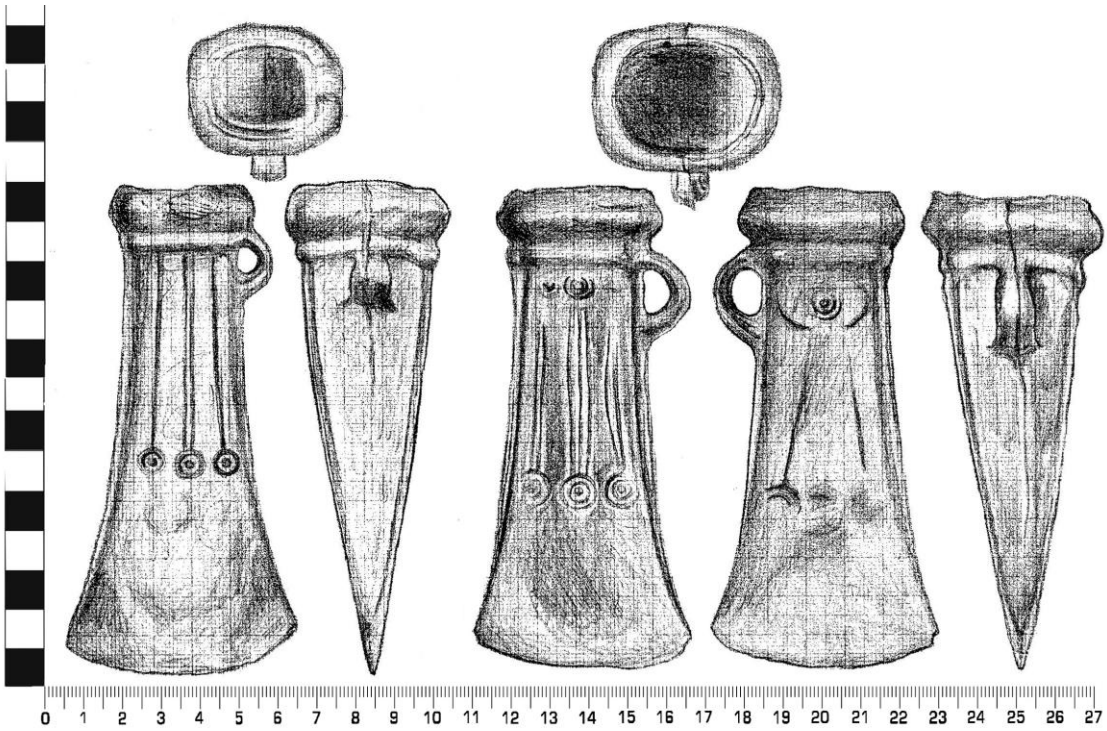


Figure 3.18: Two axes from the Kingston hoard (Surrey: nos. 990-991) with different, unique rib-and-pellet decoration; no. 991 depicts a different ornament on each side

3.6.8. Different depositions = different functions?

Discussing Neolithic axes of Langdale type, Needham suggested that the interrelationship between the classification of a person and the accordant material symbol could be reinforced by the act of procurement: this would involve distant travel to see the craftsmen who would make the axe, negotiation and cooperation with other communities engaged in the venture, and later the retelling of the sequence of events which brought the desired end result (Needham 2008, 318). In this case the recalling and retelling of the chain of events could possibly have taken place at a meeting or gathering that also involved feasting and possibly horse riding and combat performances (figs. 3.19+3.20). This is suggested by items found in hoards in association with some of the large Sompting type axes, such as at Sompting (Sussex, nos. 1009-1025) and Llyn Fawr (Glamorgan, nos. 1294-1299). With only axes

Figure 3.19: Horse bit from Hindon, Wiltshire (found in same field as Hindon hoard, nos. 1354-1387), recorded on the PAS database as WILT-6D4FF8

present in these hoards, and hardly any spearheads and no swords at all, we have to ask the question if socketed axes had not in some way replaced swords and spearheads as weapons in real combat or combat performances in the Early Iron Age.

Unfortunately, there is almost no evidence on our Early Iron Age axes that would prove metal-on-metal collision, such as deep cuts, nicks, dents or heavy damage to the axes' surface. However, amongst the small number of socketed axes showing off possible intentional damage, such as nos. 79: Quy Fen, Cambridgeshire; 194: Skelmore Heads, Cumbria; 895: Watton, Norfolk; 909: Methwold, Norfolk and nos. 1032 and 1047 from Figheldean Down, Wiltshire, there are very few showing off damage that could have been inflicted by another socketed axe. The best example is the cutting edge of one of the transitional axes from the Llyn Fawr hoard which had received a number of blows that effectively put it out of use for cutting and chopping (no. 1296: Llyn Fawr, Glamorgan). This damage was most probably inflicted by another axe, given the angle, depth and shape of the cuts. An example for damage

Figure 3.20: Horse bit from Hindon, Wiltshire (found in same field as Hindon hoard, nos. 1354-1387), recorded on the PAS database as WILT-80FA63

inflicted by socketed axes on objects other than socketed axes comes from the Melksham hoard (Wiltshire, fig. 3.21).

Figure 3.21: The Melksham hoard (Wiltshire, Devizes Museum Acc. Nos. 9-13.1972, 30.1972 and 153.1981 (i-iii)

One of the phalerae from the hoard displays clear evidence for repeated stabbing that would have rendered the object effectively useless and was inflicted by either a socketed axes or a sword (Gingell 1979; Osgood 1995, 50-59). The brutal destruction of the axe blade from Llyn Fawr (fig. 3.22) and other socketed axes showing intentional damage, as well as the stab marks on the phalera from Melksham meant that these objects no longer performed their

original role in society that is chopping wood or being a decorative ornament on a horse's harness. It does not necessarily pre-empt the object's ultimate death, however (Joy 2009, 540). Initially, an axe may have been made to perform a certain function and once it has fulfilled this function it is disposed of, but

Figure 3.22: Three socketed axes from the Llyn Fawr hoard (Glamorgan, nos. 1295, 1296+1299 (replica)). They were probably all made from the same mould template and no. 1296 shows clear signs of intentional damage along the blade.

instead of deposition it could have also been used in a different context performing a different function, thus gaining a 'new life after death' (Marshall

2008, 63-5; Joy 2009, 545). It is notable though that the final deposition (or their *final role*) – was mostly with others of their own kind. The final deposition of socketed axes was not a solitary affair: 80% of Early Iron Age socketed axes were found in hoards which, for all intents and purposes, *was* their final (prehistoric) deposition. This addition of 'prehistoric' is a significant one: we do not know how many times hoards were deposited and excavated, but since we found the hoards in their specific resting places it can be assumed that these resting places are where the final prehistoric deposition happened over 2000 years ago. Now that they have been excavated and are kept in a museum collection, their 'life' effectively carries on. We cannot know if their findspot was meant to be their final resting place in the past: for all we know today, people could have revisited places of deposition each year or each season, dug up the socketed axes from the year before, used them again in the same or a different context as the year before, and then reburied them again only to revisit the same findspot again in the next year.

Most hoards contexts do not allow the distinction of this kind of finer chronology, but there is one instance where deposition over time in the same location may have played out just like that: at Netherhampton (Salisbury, Wiltshire, nos. 1061-1202). This large hoard (535 artefacts to-date) consists of artefacts spanning over two millennia (2400-200BC), with almost every century represented (Stead 1998, 114+118-119). The hoard contained a large number of socketed axes of Portland type (+141) as well as an axe of Sompting type, Figheldean Down variant (no. 1096) and other Early Iron Age objects which suggests that either the entire hoard was reburied in the Early Iron Age or a large portion of Early Iron Age material was added to an already existing and well-known multi-period deposit. Either explanation is possible and even though the hoard is listed in this thesis as an Early Iron Age hoard because of the large amount of Early Iron Age material it contains, the large number of Middle Iron Age objects in the hoard allows scholars working on 2nd century BC hoard to incorporate the hoard in their corpus. However, a similar, yet smaller hoard found in the same area (Vale of Wardour, Wiltshire, nos. 1388-1392) lends credence to the idea that multi-period hoards were a part of Early Iron Age life in this region of Wiltshire. Unlike Salisbury, the Vale of Wardour hoard does not

contain any artefacts dating from the Middle or Late Iron Age: the latest batch of artefacts can be dated to the British Early Iron Age and no artefacts were added thereafter.

The deposition of multi-period assemblages tells us that people in the Wiltshire region were aware of earlier artefact assemblages, but rather than recycle the older artefacts and turn them into usable new tools, weapons or ornaments, they decided against it. It was decided that the function and resting place of these artefacts should not be changed. It does not matter whether they had been curated over- or underground or not curated at all: the artefacts had, at some point come from the ground and that was where they were meant to stay.

3.7. Conclusion

Most past approaches to socketed axes only described the basic type groups, but few suggested sub-divisions of Early Iron Age types except for Schmidt and Burgess (1981), and their variants must be considered problematic because of the limited geographical area and small size of corpus they studied.

All of the approaches lack interpretation of contexts and associated finds; they were mainly concerned with typology, dating and – to some extent - metallurgy. However, none of them delved any deeper into the subject of Early Iron Age socketed axes, hoards and the contexts they were found in and this is what this research proposes to do.

Socketed axes went through a very fundamental change in the Late Bronze Age-Early Iron Age transition period. Even though their overall shape remained the same, their size, decoration and weight changed dramatically. Several new types evolved that were very different from the preceding Late Bronze Age socketed axes. Late Bronze Age axes from different regions were of similar sizes and of similar weights and did not display a great variety of decoration, while Early Iron Age socketed axes displayed a much wider range of weight, length and ornament: throughout the transition period the range had undoubtedly expanded.

This drastic change in weight, size and also metallurgy strongly suggests that their primary use and function had also changed from being a type of everyday woodworking tool to a much wider, more variable range of uses that included

use in combat, trade, communal gatherings, displays and deposition. This sudden change strongly suggests that the perception of axes had changed during the transition period: axes were no longer merely woodworking tools; they had breached the walls and transformed into ingots, weapons for combat or display and ornaments or artefacts used in public performances.

The terms *decoration* and *use* of Early Iron Age socketed axes describe two different types of evidence that can help us understand why socketed axes were made, what they were used for and what their ultimate *function* was. Ever since Appadurai's work, prehistorians have tried to study 'cultural biographies' of objects, a term which refers to the various ways in which material culture had been treated between their creation and their destruction (Appadurai 1986). Objects derive their functional meanings largely from such factors as decoration, shape and weight as well as our personal experience and understanding of their individual traits (Hodder and Hutson 2003, 30). Thus, it would be easy to conclude that a prehistoric artefact which is shaped like a modern axe (that is mainly used for woodwork), is made from metal like a modern axe and is similarly hafted to a modern axe, is, in fact, an axe. However, not all Early Iron Age socketed axes fall into this category. In fact, most of them do not. Armorican axes are widely accepted as an item of value for exchange in a pre-monetary society (Briard 2001, 140; Briard 1995, 190-191) and it would come as no surprise if axes of Sompting type, Figheldean Down variant would have had a similar use. Socketed axes of Sompting type, Kingston and Tower Hill variants, on the other hand, may have been weapons suggested by their large size and curved blades, while the small, brittle socketed axes of Portland and East Rudham, Hindon and Blandford types may have been showy instruments with sonorous qualities used for display suggested by their metallurgy and surface treatment.

In disagreement with Gell (1998, 5-6) who advocates that there is no symbolic or hidden meaning in the general appearance and decoration of objects, Hodder and Thomas advocate that material culture is employed as a means of communication (Hodder 1982; Thomas 1989, 10). The great differences in our Early Iron Age socketed axes' size, weight, metallurgy and decoration support the argument that decoration and surface treatment do hint at the objects' use

and ultimate function, even though use-wear analyses cannot examine the full life of an artefact (Joy 2009, 545). For example, studies of use-wear and artefact damage have shown that objects of the same type but discovered in different contexts could have had very different uses with damage histories highlighting alternative life trajectories (Taylor 1993; Bridgford 1997; Joy 2009, 545). In suggesting that objects had biographies very much like people, Gosden and Marshall argue that objects do not just provide a stage setting to human action; they are integral to it, and that, if we consider material culture in its different moments of production, exchange and deposition or destruction, then little is left out, especially once each of these is set within its social contexts and consequences (Gosden and Marshall 1999, 169).

Bradley suggested that the deposition of objects took those objects out of circulation they would no longer pose a problem of interpretation and only the memory of the depositional event remained (Bradley 2002, 13). The brutal destruction of the axe blade from Llyn Fawr and other socketed axes showing intentional damage along with the phalera from Melksham these objects could no longer perform their original role chopping wood or being a decorative ornament on a horse's harness. It does not necessarily suggest the object's ultimate death, however (Joy 2009, 540). Initially, an axe may have been made to perform a certain function, such as that of a tool, a weapon, an instrument or an item of trade. Through the act of destruction, they effectively changed into a new role and could now start a new life performing a different function, even if that new role was just being a memory in a story of its destruction that was to be retold many times over. Ultimately, the destruction or deposition of the axe did not mean its life had ended and it was now useless, but instead, that it fulfilled a new role and was part in a different performance (Bradley 2002, 55; York 2002). Adopting this new shape was important in order to make the axes useful to fulfil another, different role in a different context, as Bridgford suggested for the different functions and roles of Bronze Age swords, depending on the context and condition in which they were found (Bridgford 1997b, 95).

The casting of more diverse axe types was triggered by the arrival of iron and is probably the manifestation of a metal trying to reinvent itself – or rather, a metal

that needed to be reinvented by the Early Iron Age metalworkers so it could survive the passage of time.

Bronze had been omnipresent for nearly two thousand years; like stone in its time it had been the one and only material for tools, weapons and ornaments. Until the dawn of the Early Iron Age bronze had never been threatened to be replaced but a more suitable material and even at the onset of the Iron Age it did not seem likely. The first iron objects were almost exact copies of their bronze predecessors; they were crude and certainly not superior to bronze artefacts; it was only later that shapes more suitable to forging in iron were adopted (Salter and Ehrenreich 1984, 152).

Iron was not bronze and bronze was not iron: the small number of iron copies of Late Bronze Age artefacts bore witness to a very short trial and error period that eventually ended in iron surpassing bronze as the main material used for tools, weapons and larger, stronger fittings. However, people were reluctant to give up traditions, objects and a material that they had known so well for so long. Bronze was never abandoned but its use and purposes needed to be redefined in the Early Iron Age.

After the very short Late Bronze Age-Early Iron Age transition period where bronze and iron were used alongside each other, iron surpassed bronze and their paths split and went into two different directions. Even though the shape of the socketed axe was kept, these new groups of artefacts were not necessarily socketed axes any more.

CHAPTER 4

METHODOLOGY

4.1. Introduction

Understanding the Earliest Iron Age does not only mean understanding the settlements; it also means trying to understand single finds of metalwork and metalwork depositions detached from contemporary Early Iron Age settlements (Haselgrove *et al* 1997, 17-19; Bradley 2007, 202).

The greatest corpus of material is that of socketed axes (fig. 4.1). This research will not only suggest a new and revised typology of Early Iron Age socketed axes, but also discuss their connection to the landscape they were found in and settlements and other sites nearby.

This chapter will introduce the methodology that was used to tackle the corpus of 1412 axes. It will outline the material, discuss the sources of information and give a detailed account of methods used to describe and analyse the corpus of axes. It will provide a framework for this research and also show biases and limitations of the study.

4.2. The material

This research is concerned with the typology, metallurgy, distribution and deposition of cast copper alloy and iron socketed axes in the British Early Iron Age. Socketed axes occur in both multiple depositions (hoards) and as single finds. The thesis looks at how their single and multiple depositions related to contemporary and earlier sites, for example settlements, ring barrows, stone circles and other sites pre-dating the Early Iron Age. It will also look at contemporary types of metalwork, for example swords, spearheads, feasting and riding equipment and ornaments associated with them.

Previous research has only touched on Early Iron Age socketed axe typology and distribution (Burgess 1971, 267-272; Moore and Rowlands 1972; O'Connor 1980) and no one has looked at their role within Early Iron Age society.

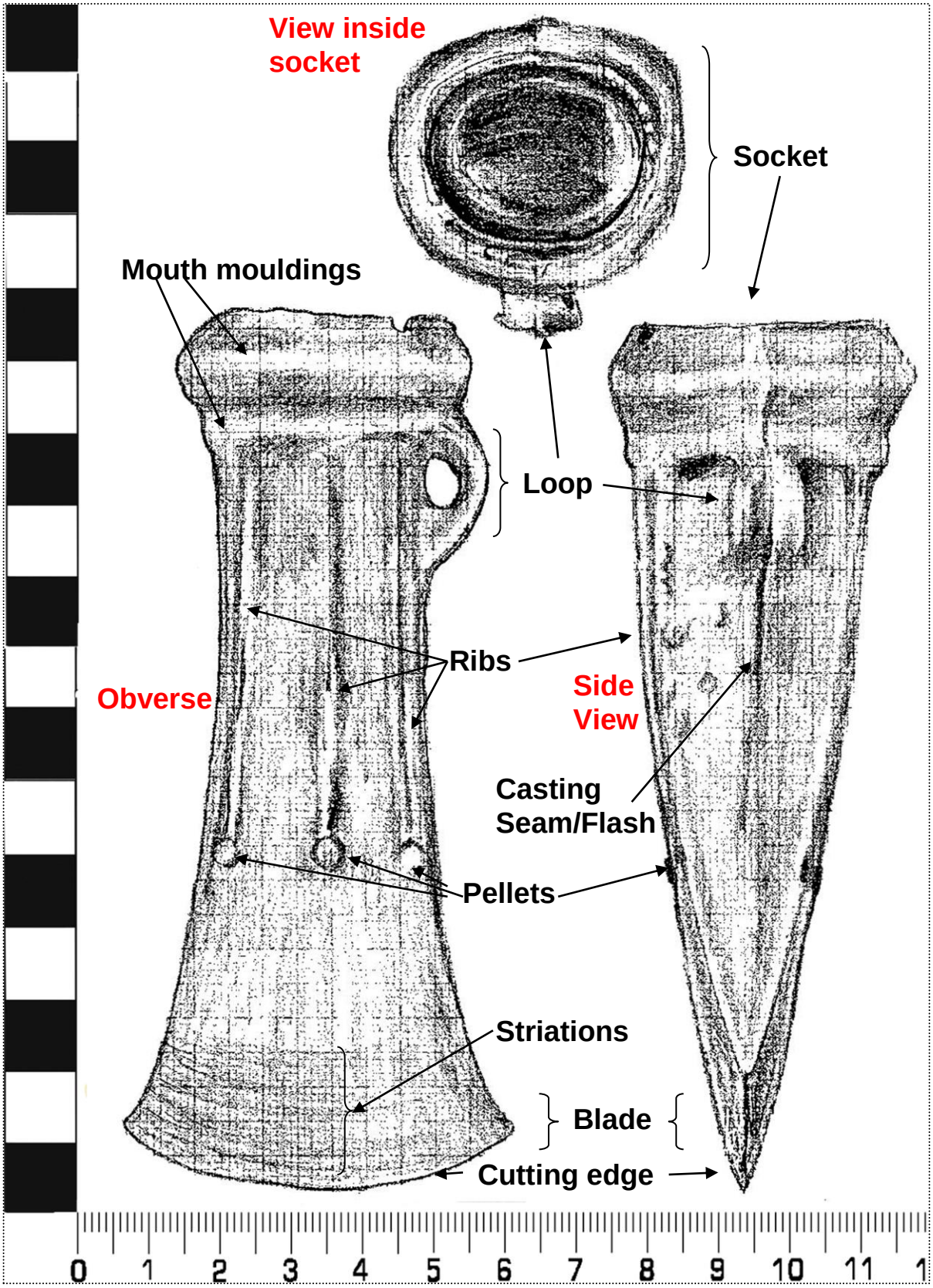


Figure 4.1: Socketed axe of Sompting type, Cardiff II variant from 'Scotland' (no. 1339) demonstrating socketed axe terminology used throughout this thesis

Figure 4.2: Socketed axe fragment of Blandford type from the small multi-period assemblage from Tisbury (Wiltshire, no. 1410), recorded as WILT-0594F7 on the PAS database; image courtesy of PAS

For this research I collected all available information about Early Iron Age socketed axes. The total number of Early Iron Age socketed axes is 1412, but only 1408 are discussed in this thesis; the socketed axe from Shepperton Ranges (Surrey, no. 1409; Needham 2009, 46-48) and the small hoard from the Tisbury area (Wiltshire, nos. 1410-1412, fig. 4.2) were added after the general data collection ended and were not measured or mapped. I added them to the corpus not only for completion's sake, but also because they add important contextual information to the already known corpus of Early Iron Axe socketed axes: the axe from Shepperton Ranges is the only axe known that was found with the haft still intact and the small hoard from the Tisbury area is a small multi-period hoard that is related to the larger multi-period hoard from the Vale of Wardour (Wiltshire, formerly known as 'Tisbury Hoard', nos. 1388-1392).

This study considers different aspects beginning with the axes' typology and chronology, and then move on to investigate contexts and interpretation.

4.3. Objectives

The two main objectives of this thesis are, firstly, to propose a reworked and more comprehensive typology of Early Iron Age cast copper-alloy and wrought iron socketed axes in conjunction with their metallurgy, distribution and deposition, and secondly, to discuss their place within Early Iron Age society and what part they may have played in the people's life, work, trade and exchange, ritual and death.

Socketed axes are the most numerous type of metalwork from the British Early Iron Age. Nearly all were found in hoards or as single finds; none of the copper alloy axes were discovered in settlement contexts and none of the iron socketed axes were discovered in hoards. This suggests that in the Early Iron Age socketed axes were part of very specific spheres of use and deposition.

This research concentrated primarily on those cast copper-alloy socketed axes which have been classed as Sompting type and its contemporaries, such as Portland, Hindon, East Rudham and Blandford type axes (see Chapter 5). In addition, it also includes the small corpus of 24 contemporary wrought iron socketed axes. Iron socketed axes were copies of their bronze forerunners but were not used in exactly the same way. That means that although they have the same shape, the metal signalises an important difference in treatment by their makers or owners.

4.4. Data collection: making the case for museum visits

For this thesis I first carried out an extensive literature research in order to establish the extent of the corpus of Early Iron Age socketed axes. This preliminary stage resulted in a corpus of 1412 Early Iron Age socketed axes (excluding 15 axes found since completion of this thesis). During the literature research I discovered that the information on each axe was very variable with much information often missing. I therefore decided that, in order to obtain objective comparative data that would allow for socketed axes from different hoard contexts and single finds to be compared with one another, I needed to study a large sample of Early Iron Age socketed axes in closer detail. The sample was based on which socketed axes were available for study in museums, private collections and via the Portable Antiquities Scheme.

Out of 1412 known Early Iron Age axes I have analysed 954 specimens: 680 axes from hoards and 274 single finds. This certainly did not pose a problem, because the great majority of socketed axes presented here was either available for study or else, the individual publications and ‘notes of discovery’ offered at least some of the information needed, e.g. measurements, weights and/or more detailed information about the findspot and associated finds.

I visited the following museums and collections to view and analyse the Early Iron Age socketed axes held within their collections: British Museum (London), National Museum of Antiquities (Edinburgh), National Museums and Galleries of Wales (Cardiff), University of Cambridge Museum of Archaeology and Anthropology (Cambridge, Cambridgeshire), Ashmolean Museum (Oxford, Oxfordshire), Salisbury Museum (Salisbury, Wiltshire), Bristol Museum and Art Gallery (Bristol, Avon), Devizes Museum (Devizes, Wiltshire), Norwich Castle Museum (Norwich, Norfolk), Norfolk Archaeological Unit (Gressenhall, Norfolk), Moyse's Hall (Bury St Edmund's, Suffolk), Suffolk Archaeological Unit (Bury St Edmund's, Suffolk), Suffolk County Museum (Ipswich, Suffolk), Hampshire County Museum (Andover, Hampshire), Peebles Museum (Peebles, Peebleshire), Bute County Museum (Rothesay, Isle of Bute), Birmingham Museum and Art Gallery (Birmingham), Tullie House Museum and Art Gallery Trust (Carlisle, Cumbria), Museum of Lancashire (Preston, Lancashire), Lancaster City Museum (Lancaster, Lancashire), Ruskin Museum (Coniston, Cumbria) and the Dock Museum (Barrow-in-Furness, Cumbria); the Tower Hill (Oxfordshire) and East Rudham (Norfolk) hoards and two axes from the Skelmore Heads hoard (Cumbria) are currently in private possession and I am very grateful to their owners for letting me study their axes: Eric Penser (Tower Hill Hoard, Oxfordshire), Robert Battersby (East Rudham Hoard, Norfolk) and Mr David Parker and Dr John Parker (Skelmore Heads Hoard, Cumbria).

Figure 4.3: This is the only image that we have of socketed axe no. 208 from Lovehayne (Devon), a Sompting type (Tower Hill variant). This engraving was published by Way who states the axe may have been part of a hoard (1869, 343).

For many early finds the only available information, notes on contexts and details about the socketed axes was found with each individual specimen. This

included information found scratched or written on the axes' surfaces or, in many cases, findspot information was written on labels that 19th and early 20th century antiquities collectors and museum curators had stuck on the outside of the axes or tied to their loops (fig. 4.4). In some cases existing published information of them did not match contemporary findspot information, so this is the most up to date and accurate investigation of Early Iron Age socketed axes.

Figure 4.4: Socketed axe of Sompting type, Kingston variant from near Cirencester (Gloucestershire, no. 668) with findspot and identification label and writing on the face of the axe

Where axe measurements were published, these are often limited to their lengths and blade widths and rarely included the axes' weights and wall thickness. Almost no publication made a point of mentioning the socket dimensions that is the width and length or number of the axes' mouth moulding(s). This study will create a uniform style using metric data and based on measurements to allow comparison.

I found that, where their current location was known, the great majority of socketed axes were readily available for study in museums and private collections. I was also able to study recent finds of Early Iron Age metalwork hoards whilst they were undergoing analysis in the British Museum as part of the Treasure proceedings (the 2002 Amendment to the Treasure Act of 1996 stipulates that prehistoric metalwork assemblages of 2+ objects constitute Treasure and need to be reported under the Act).

4.5. Note on conditions of inclusion

The socketed axes and assemblages under consideration needed to fulfil certain requirements for their inclusion in this study. The most important aspect was that both socketed axes and socketed axe fragments – single finds and specimens from larger or multi-type assemblages (or publication thereof, e.g. fig. 4.3) – needed to be of sufficient size and in good enough condition for the typological analysis. If it could not be established whether the axe or axe fragment in question was showing enough characteristics of one of the known or suggested Early Iron Age types, they were not considered here because it was likely that they would invalidate or in the very least tint the results.

The comparative, typological and wear analyses rely heavily on the information which is available from each individual specimen. The most important factors were the socketed axes' state of completeness and their state of preservation. If an axe was complete and in good state of preservation, all required measurements could be obtained, that is the axe's entire length of body, width of blade, socket ratio and its weight. If only the lower half of an axe survived and it was, in most cases, possible to assign it to a type, a sub-type and conduct a wear analysis, it would be classed as providing 'sufficient measurements'. If only a small axe fragment survived and it was only possible to assign the fragment to a type and to conduct a minimal wear analysis it was classed as having provided 'some measurements'. If an axe provided 'no measurements' it was only possible to assign the axe fragment to a type on the basis of wall thickness, surface finish or decoration, but not to conduct any further wear analysis.

Out of 274 single finds of socketed axes (excluding moulds) included are all the measurements from 105 axes, sufficient measurements from 22 socketed axes, some measurements from 9 socketed axes and no measurements from 138 socketed axes (fig. 4.5). More than 50% of the sample, without measurements, all could still be assigned an axe type and in some cases, a type variant. Out of 1127 socketed axes found in a hoard context, 680 specimens could be analysed further in a museum environment. Out of those, there were all measurements for 593 examples, sufficient measurements for 2 socketed axes, some measurements for 63 socketed axes and no measurements for 22

socketed axes (fig. 4.5). As above, most axes could be assigned to an axe type, even though measurements may have been limited.

Measurements/socketed axes	All	Sufficient	Some	None
Single finds (N=274)	105	22	9	138
Associated finds (N= 680)	593	2	63	22

Figure 4.5: Quality of measurements obtained from socketed axes

It will become clear in the following chapter that this large sample greatly facilitated the division of the material into typological groups; thus, the corpus of socketed axes was divided into nine types and four variants which will be in turn described and discussed in Chapter 5.

4.6. Notes on the typological approach

Combining the typological classification systems of Schmidt and Burgess (1981), Eogan (2000) and an equally exemplary Continental catalogue of socketed axes from the Netherlands published by Butler and Steegstra (2001-2004), individual socketed axes were listed with all available measurements (that is lengths, widths, socket dimensions and weights). Each axe was given a running number and the catalogue is organised in alphabetical order according to the countries and their individual counties: first the counties of England, then Scotland and finally Wales.

Using the terminology outlined here (fig. 4.1), the individual entries also include a detailed description of the axes' surface (decoration, current condition and, where applicable, conservation) and notes on use and wear and possible residue left inside their sockets, such as metal, wood or clay.

Burgess' (1971) initial approach of measuring and weighing axes and comparing these measurements to those of similar axes in the Sompting hoard seemed sensible and this is why this general approach was applied in the initial stages of this research. Following Burgess' approach, this research started off by looking at the axes from Canon Greenwell's collection in the British Museum

and related types mentioned by Evans (1881). All of these axes were measured and weighed and already during the initial stages of this thesis it became clear that Burgess' definition was not applicable to all of them. After comparing all of the decorated axes in the British Museum's collection to Burgess' initial definition of the Sompting type, it was found that it was insufficient and lacking in detail. This thesis will address this problem in more detail in Chapter 5.

Figure 4.6: The Tower Hill hoard (Oxfordshire, nos. 932-953)

4.7. A note on the visual and alphabetical catalogues

The visual catalogue includes photographs of nearly all axes and drawings of most of them. The drawings are all based on the objects themselves, not photographs or illustrations. Both photographs and drawings were made by the author unless otherwise stated in the catalogue.

The colour photographs give a good indication of the differences in colour and hue, but in some instances, the drawings indicate differences in texture and shading much more accurately (for example figs. 4.7 and 4.8 showing a photograph and a drawing of the same axe, no. 1223 from Cayton Carr, Yorkshire). The drawings' intent is to provide a better reflection of the socketed

Figure 4.7: Photograph of the axe from Cayton Carr (Yorkshire: no. 1223): Sompting type, Kingston variant

axes' true surface texture as well as marks of wear and damage. The given side view is always be the looped side. A view from the top into the socket of the axe is also given in most cases as part of the drawing: this will show the shape of the mouth as well as objects or hafts still lodged inside the socket.

The alphabetical catalogue offers measurements and a brief description of each axe in turn including a note their actual state of preservation and surface texture, along with signs of secondary working such as trimming, re-sharpening and accidental or probable intentional damage. The measurements are those of maximum length (LE), maximum width (WI) at the cutting edge and weight (WE). The measurement of the mouth of socketed axes includes the internal and external diameter, the smaller size always stated first. This gives an indication of the thickness of the mouths' rims. The inclusion of the internal and external diameters of both the length and width of the socket also gives an indication of the socket alignment, i.e. if the socket is rectangular (that is aligned

with the blade), square or sub-rectangular (that is ‘back-to front’). The socket needs to be measured in its entirety to obtain the socket ratio which means that both outer length and width and inner length and width are needed. Using the four different measurements of inner and outer mouth widths and lengths allow for different shapes of mouths and different thicknesses of mouth mouldings to be described. The socket ratio can be calculated using the following formula using the inner and outer width (WI (inner) and WI (outer)) and inner and outer length of the socket (LE (inner) and LE (outer)):

WI (outer) x WI (inner) / LE (outer) x LE (inner).

If the resulting mouth ratio is smaller than 1 (<1) the mouth is sub-rectangular and if the resulting mouth ratio is greater than 1 (>1), the mouth is of rectangular shape, that is aligned with the blade. If the mouth ratio is 1 (=1), the mouth is square. However, the mouth ratio can only be calculated satisfactory if the mouth is complete.

The axes are described using colours such as ‘green’, ‘brown’ or ‘gold’ and using qualifiers such as ‘dark’, ‘light’, ‘bright’ or ‘dull’. These expressions mean to reflect the fact that various shades of a colour and lustre are usually found. The surface of a relatively small number of axes consists of a very smooth, shiny patina. In the majority of axes, however, this top layer or skin is damaged and remains in patches. Sometimes it has been completely removed, either

Figure 4.8: Drawing of the axe from Cayton Carr (Yorkshire: no. 1223): Sompting type, Kingston variant

accidentally or intentionally during the cleaning and conservation processes. The metal below this surface skin is normally rougher, and may be covered with innumerable small depressions or holes, a state which is described as porous or pitted. Some axes have undergone chemical treatment to prevent further corrosion, damaging the axe in the process (fig. 4.9; Plates 64-65). Relatively uncorroded specimens are described as having even and smooth surfaces. Working of the axe after casting is reflected in such terms as hammered or trimmed. A number of axes were smoothed and polished after the casting, and the casting seams were removed or trimmed. However, it is typical for some types of Early Iron Age axes that none of this post-casting work had taken place and thus, a special note is made in cases where these processes have been carried out only partially or not at all (compare for example figs. 4.10 and 4.11). Noticeable casting flaws are usually mentioned.

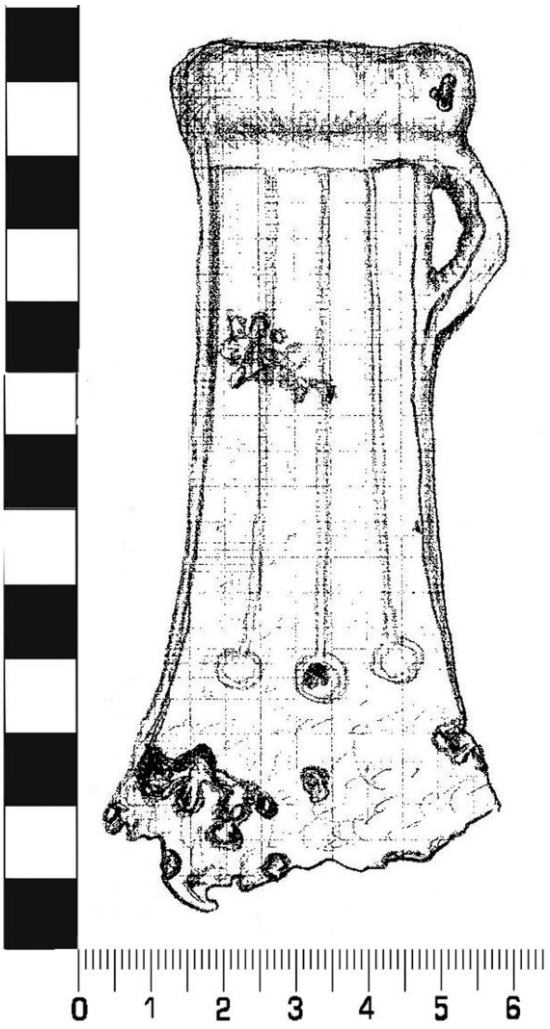


Figure 4.9: Socketed axe of Sompting type, Kingston variant from Mildenhall (Suffolk: no. 972): damaged by anti-corrosion treatment

If the socketed axe was published, bibliographic references are given. However, it is not attempted to present a complete bibliography for every single find. If known or recorded at a museum, the exact museum registration or accession number is given. In a number of cases, however, the accession numbers or place of deposition were not known for a number of reasons. For examples, single finds recorded by the Portable Antiquities Scheme will have normally had to be returned to the finder and their disposition is now unknown. New hoard

finds reported under the Treasure Act may still be undergoing examination in the British Museum and no museum will have been given the chance yet to acquire the find. In the catalogue this is indicated by the abbreviation *returned to finder*, *currently undergoing Treasure examination* or *no reg.* which should be read as *no registration number known.* If the axe is part of a known collection within the named museum, the collection name is given. In case of the British Museum, a note on what information was included in the British Museum Register at the time of accession is given, too. This may include a special note on find circumstances, findspot or associated finds.

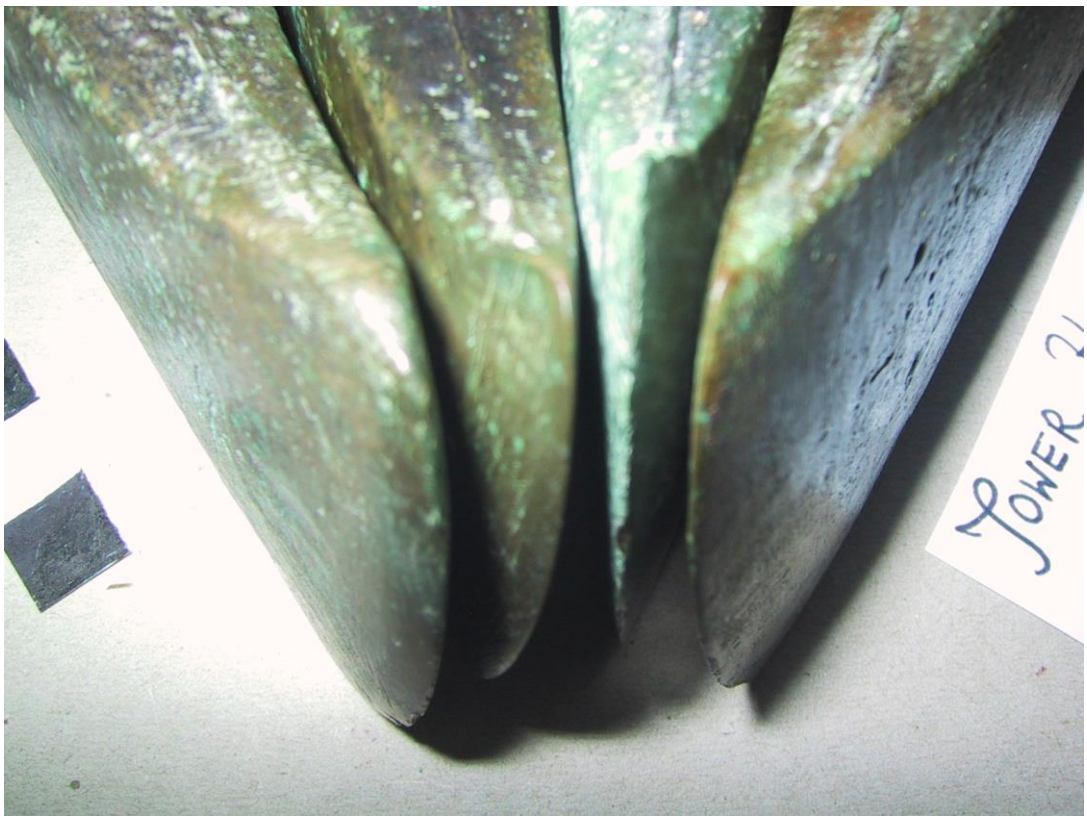


Figure 4.10: Close-up of the sharpened blades of socketed axes nos. 933-935+953 from the Tower Hill hoard (Oxfordshire): Sompting type, Tower Hill variant – showing '*definite signs of wear*'

The provenances given for each find normally include the findspot and/or the nearest village or town and the county. A six- or more figure grid reference is given and there will always be an indication of what the grid reference is centred on, i.e. nearest town or village. Further topographical details, find circumstances and other useful information are added under *Note*. If the topographical area is

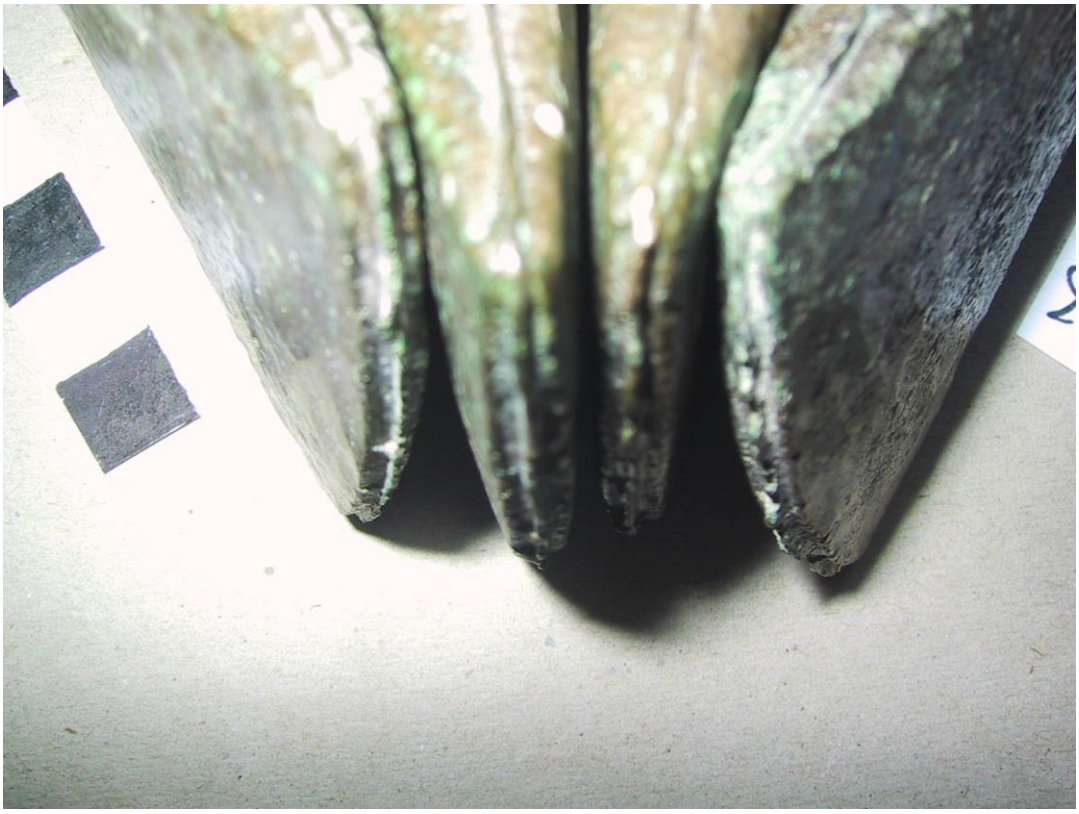


Figure 4.11: Close-up of the unsharpened blades of socketed axes nos. 936, 942, 945+952 from the Tower Hill hoard (Oxfordshire): Sompting type, Tower Hill Variant – showing '*some signs of wear*'

too large, e.g. Cambridgeshire Area, no grid reference will be given and the axe is not mapped.

4.8. A note on the wear analysis

A large part of this research deals with wear patterns on the blades, loops and bodies of socketed axes and any further marks that may suggest intentional damage. It makes sense to conduct a detailed analysis into wear and intentional damage because it is well known that, for example, axes of Armorican Type were deposited in as-cast condition, while there are usually considerable signs of wear and reuse on many of the Late Bronze Age socketed axes (Briard 1995, 177f). A conclusive wear analysis for the corpus of Early Iron Age socketed axes (other than Armorican axes) has not been conducted so far.

After assignment to a type, the individual axes' wear and damage patterns were analysed and they now form part of each individual type's discussion. Fragments of axes or damaged/broken axes which could be assigned to a type

but were too small or too worn to show any obvious marks of wear, re-use and intentional or unintentional damage were excluded from the wear analysis. The numeric values for the different stages of wear were determined as such:

1: no signs of wear
2: some signs of wear
3: definite signs of wear
4: signs of wear and intentional damage
5: unknown

The axes grouped under *no signs of wear* are all those axes which were deposited in as-cast condition that means there are no signs of further work such as hammering, shaping or removal of the casting seams or clay core. The next category, 2, groups together all those axes which show *some signs of wear* (fig. 4.11). This means that some post-casting work too place, for example the casting seams were removed and the surface shows some re-shaping or hammering, but there are no clear signs of prolonged use and re-sharpening. Axes with clear or *definite signs of use* were given the value 3 (fig. 4.10). These axes show a great extent of post-casting work that was done on them, for example removal of the casting seam, shaping and re-shaping, sharpening and re-sharpening and other clear signs that they have been used as tools or weapons. This also means there may be nicks and dents in the surface through long-term use and the blade may have been worn down through wear and re-sharpening. Socketed axes which, in addition to or instead of wear, also show clear signs of intentional damage or destruction before deposition are grouped under 4. This means socketed axes that have items other than the haft lodged inside their sockets and the intentional damage of the blade, body, loop and/or socket. If we have no information about use, wear or intentional damage, the axe will be listed under 5, *not known*.

4.9. A note on decoration

Early Iron Age socketed axes, especially those of Sompting type, are well known for the great number of very different decorations, even though they are

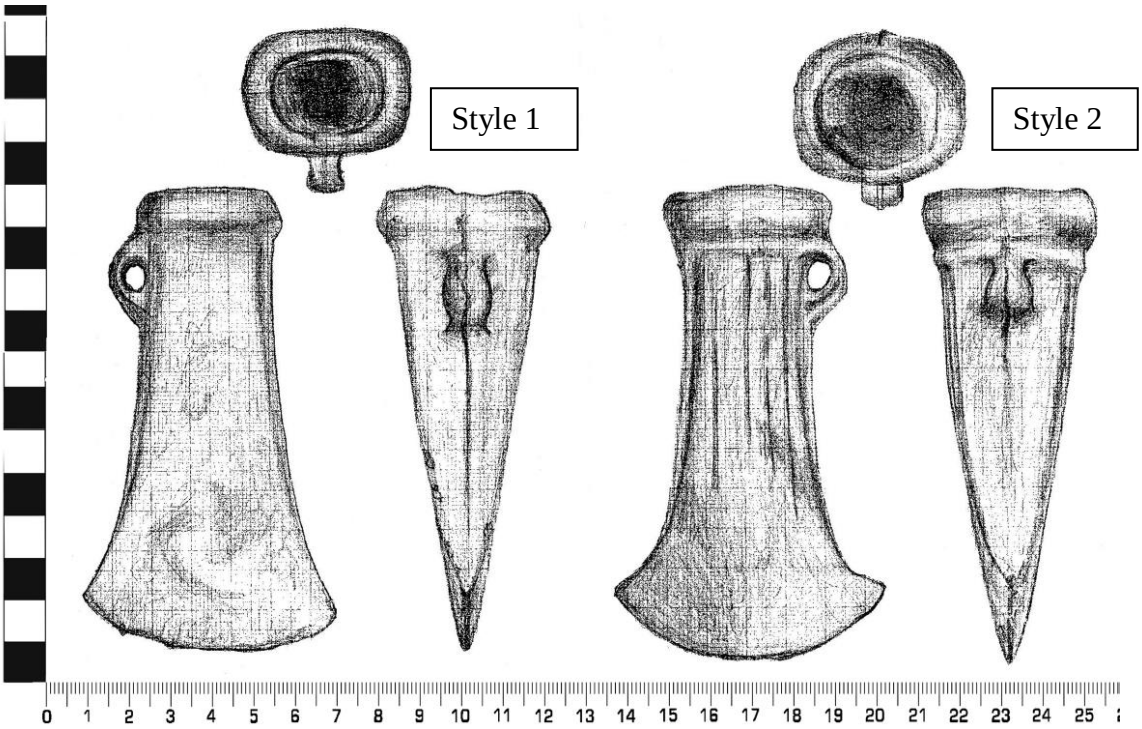


Figure 4.12: Two socketed axes from the Kingston hoard (Surrey, nos. 988 and 989): no. 988 (left) is a Sompting type, Tower Hill variant displaying *Style 1 (plain)* while no. 989 (right) is a Sompting type, Kingston variant displaying *Style 2 (ribbed)*

all generally based on 'ribs' terminating in pellets and/or circlet. However, many socketed axes are inaccurately described in the published literature. There are many variations of the 'rib-and-pellet-ornament', may it be the number or length of ribs and number of pellets, the size of either and whether the outermost ribs actually 'sit' on top of the axes' face facets or not. There are 42 different patterns of decoration and at least 26 of these patterns were found in Early Iron Age hoards, many unique.

For simplicity's sake, in this thesis the multitude of different ornaments has been subsumed into four different styles, exemplified by the four axes from the Kingston Hoard (figs. 4.12 and 4.13): *plain, ribbed,* basic *rib-and-pellet/circlet* decoration, and *elaborate* decoration (Surrey, nos. 988-991). Style 1 (plain) describes axes that bear no decoration at all while Style 2 (ribbed) describes ribbed axes with no additional pellets or circlets. The ribs can be either on the faces of the axes or along the sides, enhancing its edges. Style 3 stands for the

most typical decoration: rib-and-pellet and rib-and-circlet in all variations, while Style 4 refers to the elaborately, often uniquely decorated axes with, e.g. herring bone ornament between ribs, Ω-patterns, box-patterns, circlets connected by ribs forming a capital 'M' and those axes, more unusual still, which have a different ornament on each face.

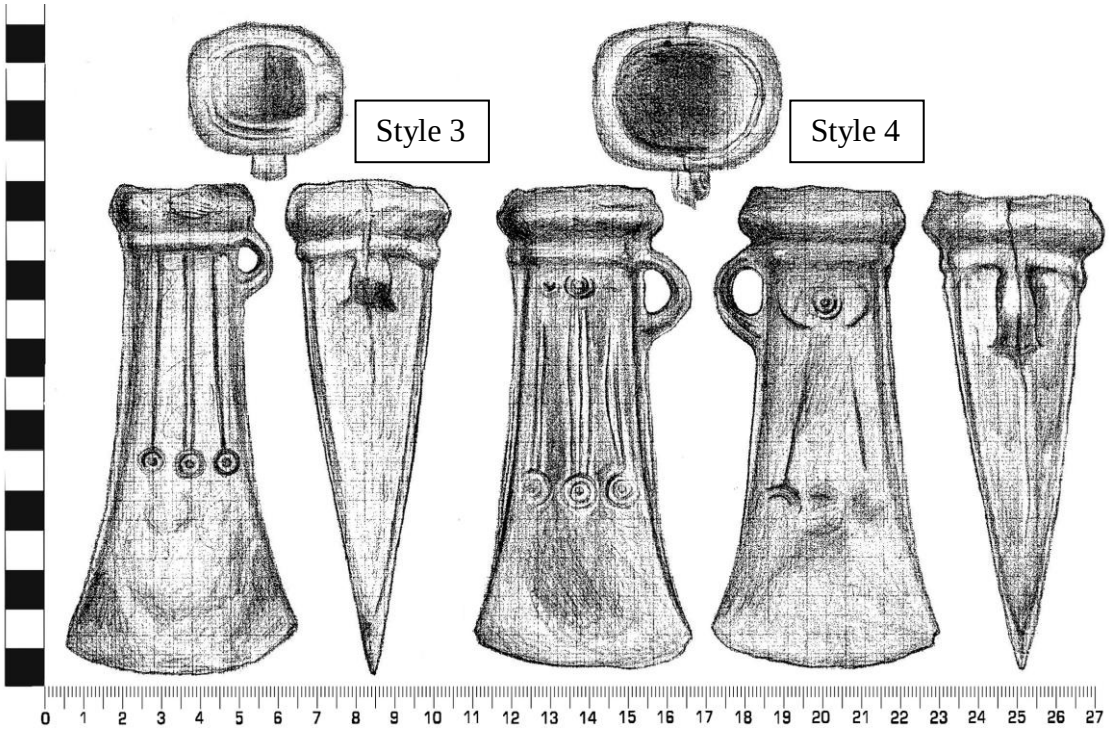


Figure 4.13: Two socketed axes from the Kingston hoard (Surrey, nos. 991 and 992): no. 991 (left) is a Sompting type, Kingston variant displaying *Style 2 (rib-and-pellet/circlet)* while no. 992 (right) is a Sompting type, Kingston variant displaying *Style 4 (elaborate)*

4.10. Sources of bias

The typology is based on measurements, the decoration on the faces and to a lesser extent, the shape of the sides of the axes. This is mainly due to the subjective nature of a typology based on ornament alone. The typology tries to describe as many characteristics as possible based on empirical data rather than personal opinion and it needs to be repeatable by later researchers.

Describing an archaeological object without the use of measurements will always be personal and subjective and thus, may be subject to misunderstandings. For example, describing the splayed cutting edge of a socketed axe as 'wide' only makes sense when compared to the length of the axe. If two axes (one very short and the other very long) have an equally

splayed cutting edge, it will look ‘more splayed’ on the shorter axe because of the length (body)/width (blade) ratio. Thus, generating and using a length (body)/width (blade) ratio is a more efficient way to describe the shape of a socketed axe and it precludes confusion and different personal opinions on whether a cutting edges is ‘widely splayed’ or not.

Much the same can be said for the alignment of the socket. The general assumption is that while the sockets of Late Bronze Age and Transitional axes are usually aligned with the blade (fig. 4.14), Early Iron Age axe sockets are not. Burgess described this feature as ‘back-to-front’, one of the main characteristics of Early Iron Age Sompting type axes (figs. 4.12+4.13; Burgess 1971, 267-72). Instead of just describing this feature for every single axe, this research prefers to list the individual sockets’ inner and outer length and width in the catalogue and give the calculated mouth ratio in the tables that are part of the appendix. Thus, a mouth ratio of =1 would mean that the axe has a square mouth. A mouth ratio of >1 means that the socket is aligned with the blade or ‘rectangular’ and a ratio of <1 consequently means that it is ‘back-to-front’ or ‘sub-rectangular’. This, hopefully, pre-empts personal perception and assumptions of ‘how the socket should be’.

Figure 4.14: Socketed axe of Transitional type with rectangular mouth moulding (=aligned with the blade) from Shelford (Nottinghamshire: no. 930)

The comparison of exact measurements greatly helped in making visible the subtle differences between the different types of Early Iron Age socketed axes

and especially differences between the four variants of Sompting type axes, particularly when specific measurements and ratios are compared, for example ½ axe's length (LE) compared to the width of the blade (WI) or the mouth ratio (LE (outer socket)+LE (inner socket) / WI (outer socket)+WI (inner socket) compared to the weight (WE) (compare Chapter 5).

All of the axes given numbers in this catalogue are complete or nearly complete. If the blade width and body length are missing in the table, but the inner and outer length and width of the socket are present, it is more than likely that the lower part of the axe is missing. If only the width of the blade is given and no body length or ratio indicator given, it is more than likely that the upper part of the socket axe or most of the socket is missing or too misshapen to validate measurement and calculating the body length/blade width ratio would be impossible because this calculation only works with complete specimens.

All socketed axes in the catalogue were given an individual number unless only a very small fragment remained. There are, however, two notable exceptions: the two multi-period hoards from Danebury, Hampshire (nos. 686-689), and Netherhampton, Salisbury, Wiltshire (nos. 1061-1202) which also included Early Bronze Age flat axes, flanged axes and palstaves. Both of these hoards are special cases and will be discussed separately in Chapters 6-8.

If a hoard contained an unknown number of socketed axes or the number of socketed axes that were part of the hoard vary greatly in different publications, the minimum number was chosen the catalogue, especially for hoards discovered in the 19th century.

As a rule, fragments of socketed axes were assigned a catalogue number if necessary, if they were part of a hoard for example. On the other hand, the smaller socketed axe fragments found in the hoards from Tower Hill, Oxfordshire (nos. 932-953), and Langton Matravers, Dorset (nos. 226-598), were not given individual numbers because many of them were too small to be assigned to an axe type. Lastly, and most importantly, however, it was felt that excessive counting and numbering would only result in a skewed final *minimum* number of socketed axes (1412 specimens) in this corpus.

4.11. Contexts and interpretation

In order to provide an in-depth study of depositions and contexts of Early Iron Age socketed axes the focus had to be on answering two questions about individual depositions and contexts: firstly, what was found with the axes and secondly, how and where exactly where they found?

The reason for why the results of this discussion could be viewed as limited or incomplete is because for many socketed axes we only have very restricted and insufficient discovery and contextual information. This is true especially for socketed axes from older, antiquarian collections: generally, no detailed information is given about containers or pits they may have been discovered in.

Much the same can be said about the research into the 'wider contexts'. There are many socketed axes for which we lack any detailed findspot information, unfortunately. However, out of 1412 socketed axes, luckily only 18 socketed axes were without any useful findspot information. These are listed as nos. 1336-1353 under 'Unprovenanced' in the catalogue in Appendix A.

For all other socketed axes, however, at least some findspot information was either published or recorded in the museums' accession registers. This information was then used to get a better understanding of the kind of landscape the find was deposited in and also, of course, to generate an Ordnance Survey grid reference (NGR) for mapping purposes.

Out of the entire corpus of socketed axes we only have 11 single finds and 10 hoards with 8-, 10- or 12-figure grid reference. Unsurprisingly, these are mostly newer finds, either recorded with the Portable Antiquities Scheme, excavated finds, or hoards that were reported under the Treasure Act of 1996 (Amendment of 2002). Most of the 6-figure grid references used in this research were generated by the author by deduction, after having researched published findspot descriptions and museum register entries. Great effort was put into this and the result is a very up-to-date database.

For example, an axe listed as having been found 'near Cambridge' (no. 86) will be given the grid reference for Cambridge, but the context will be "near wetlands" or "wetlands", because Cambridge lies on the edges of the East Anglian Fens. If the findspot indicates, for example, "Fens near Ely" (no. 88), the findspot is definitely 'wetlands' and the axe will have been mapped using

Ely's grid reference. The findspots of every single find were analysed according to their proximity to natural features, known settlements, hillforts and ancient monuments. In order to keep the findspot description as accurate as possible, qualifiers such as 'near' or 'possibly near' were used (see Appendix C – Tables/Finds Spots). A difference was made between axes found *in* a river or *near* a river because this would indicate that we are dealing with two different deposition: one made in a possibly retrievable context (near a river) and the other in a possibly irretrievable context (in a river).

4.12. Contextual problems

Unless the finds were made in the past 10 years or so, we very rarely have conclusive findspot information for the axe. This discounts the very few older finds which were acquired or studied by a very thorough antiquities dealer or collector or else, handed in to a museum whose curator at the time chose to make detailed notes of their findspots and discovery.

Seeking out the original entries in the museum registers sometimes produced the name of the farm or the street the axe(s) were found in is mentioned and, in some very rare cases, an exact description of the findspot was noted in the museum register at the time of accession.

Generally it was found that findspots for hoards were recorded more accurately than those for single finds. For those hoards and single finds which had no accurately recorded findspot, any obvious markers or features in the landscape or geographical location were noted during findspot research.

However, exact findspot information this is rare, even if the finds were made in recent years. This very unfortunate lack of detailed findspot information is owed to the fact that in the more recent past, most discoveries of prehistoric metalwork were made by metal detectorists and so-called 'amateur archaeologists' rather than trained archaeologists.

Only 20 socketed axes and hoards could not be mapped because they were either unprovenanced or found in an area to large for mapping all the other finds came with sufficient findspot information to generate an approximate six-figure National Grid Reference (NGR).

These approximate grid references were used to research the contexts and the landscape the single finds and hoards were deposited in. Many axes were said to be ‘dredged from’ a river, assuming that the axe had been deposited (lost or intentionally deposited) in the river, most notably the River Thames and to much lesser extent, the Rivers Trent, Ribble, Wey, Lark, Cherwell and many other small rivers and streams. Quite a few axes were found by peat diggers in East Anglia and Yorkshire, here most notably the fen areas of Cambridgeshire and Norfolk and the carrs of North Yorkshire. It is very likely that these now well-drained areas, very much like the well-known sites near Flag Fen (Norfolk) were marsh- and wetlands in the Late Bronze and Early Iron Age and thus perceptible for deposition of metalwork.

A note was made when socketed axes and hoards were found in coastal areas or near inland waters or lochs.

CHAPTER 5

A NEW TYPOLOGY OF BRITISH EARLY IRON AGE SOCKETED AXES

5.1. Introduction

Following the methodology outlined in the previous chapter, this chapter will discuss every new axe type in turn, with special emphasis on their decoration, wear patterns and metallurgy, where metallurgical analyses have been done.

Each of the eight new types and variants displays certain individual characteristics such as their weight, size, decoration, metallurgy and wear, which will be introduced and discussed. Furthermore, this chapter will look at the geographical distribution of each individual axes type as well as their associations that is whether they were predominantly found in hoards or as single finds. The discussion will start with the group of transitional axes which predominantly show Late Bronze Age features but already display some characteristics of Early Iron Age socketed axes. The different types of Early Iron Age socketed axes will be discussed thereafter.

5.2. Late Bronze Age/Early Iron Age transitional socketed axes

There are 67 socketed axes in this study which were either found in association with Early Iron Age socketed axes or were single finds that bear a very strong resemblance to Early Iron Age axes. However, they could not confidently be assigned to an Early Iron Age socketed axe type due to their weight, shape, measurements or decoration. Examples are socketed axes like the specimen from Hockwold-cum-Wilton (Norfolk, no. 904) which displays facets with ornamental ribs on their edges, or the axe from Lackford (Suffolk, no. 977, Plate 68) which bears a simple but unique rib-and-pellet decoration on a body that is of typical Late Bronze Age shape. These socketed axes are transitional and belong to the Late Bronze Age/Early Iron Age transition period when socketed axes started to change in shape and decoration.

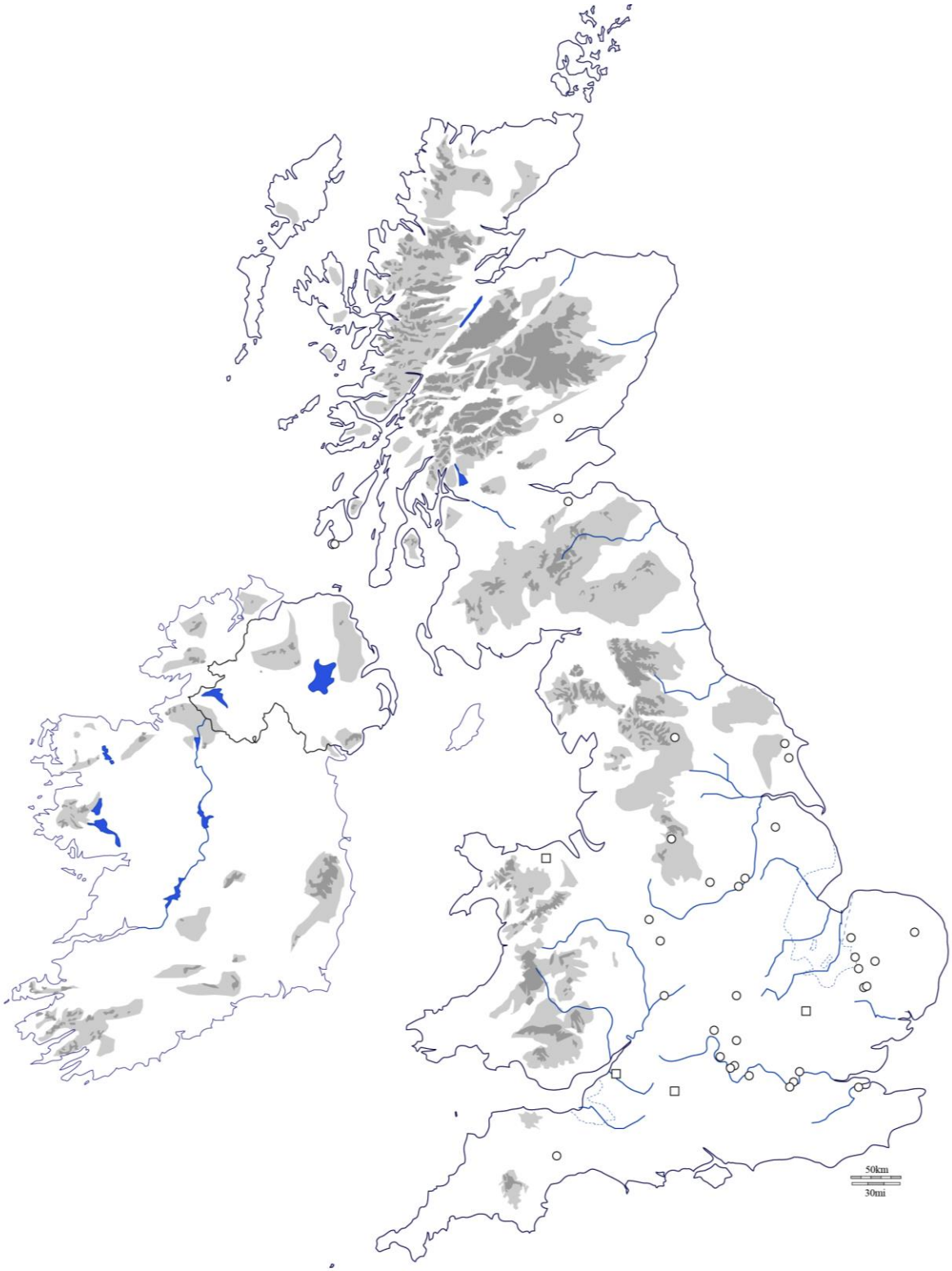


Figure 5.1: Distribution map of Transitional axes (☐Hoards; ◯ Single finds)

Socketed axes in the transitional group were never part of an assemblage dated earlier than from the Ewart Park metalwork assemblage of the Late Bronze Age (Needham *et al* 1996). Nonetheless, unlike Early Iron Age axes, they still retain one or more characteristics of earlier axes suggesting strong affinities with Late Bronze Age socketed axes of, for example, South Eastern, Yorkshire or Meldreth types. Most of these axes are single finds (41 specimens), 89 were part of very Late Bronze Age or transitional hoards and 24 specimens which were part of Early Iron Age hoards (fig. 5.1).

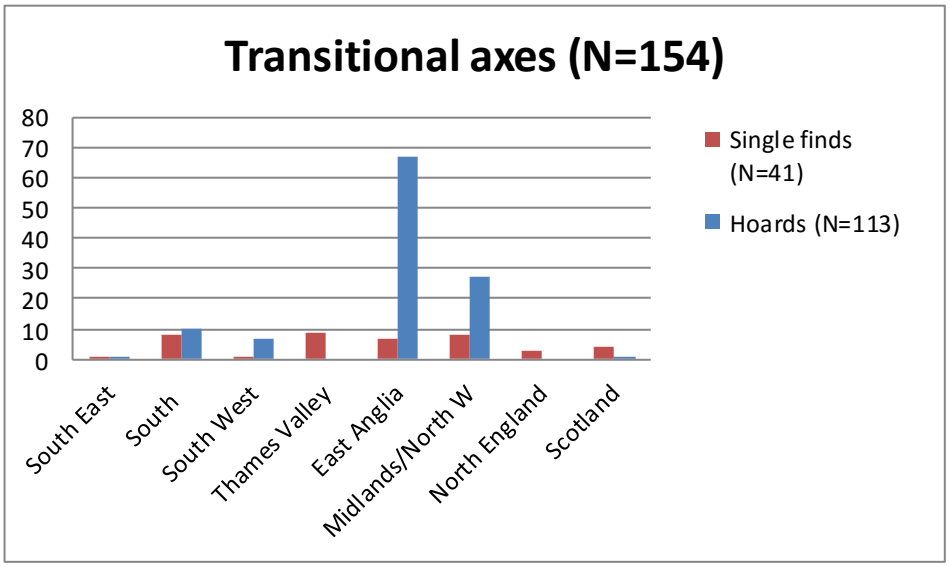


Figure 5.2: Distribution of Transitional axes (hoards and single finds)

Most single finds of these transitional socketed axes come from the South, the Thames Valley, the Midlands and East Anglia while hoards of transitional axes were predominantly found in East Anglia and the Midlands (figs. 5.1+5.2)

5.2.1. Transitional socketed axe: decoration

Transitional axes display limited decoration. There are almost equal numbers of plain, ribbed and rib-and-pellet decorated specimens, even though transitional axes found in hoards contexts tend to be ribbed (figs. 5.3 and 5.4).

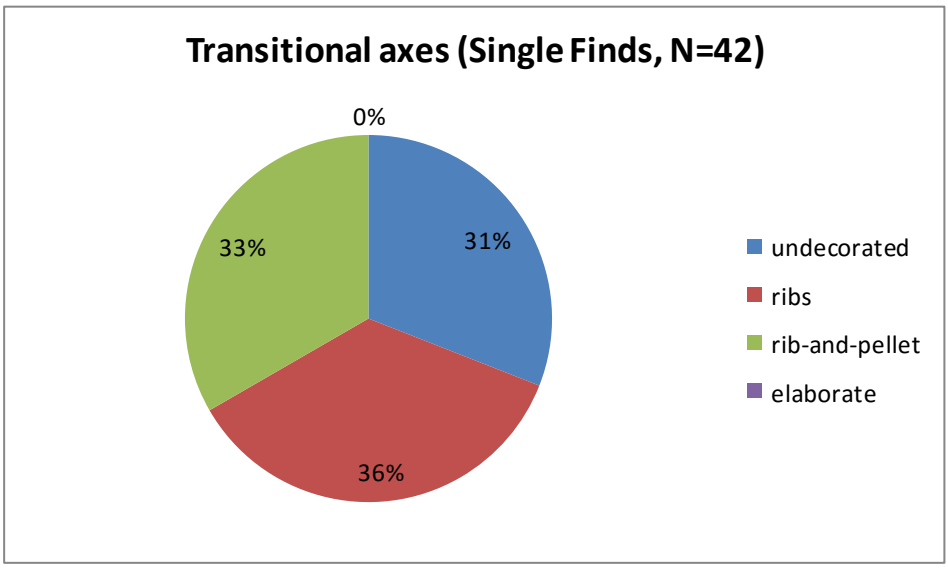


Figure 5.3: Decoration on transitional axes (single finds)

There are no elaborately decorated socketed axes of the transitional type (figs. 5.3+5.4). All decorated socketed axes of the Ewart Park metalwork assemblage were decorated with either simple ribs or a very basic-rib-and-pellet decoration. The only example with elaborate decoration previously reported as a transitional axe is the axe from Boughton (Norfolk, no. 897); however this axe is, in fact, of Sompting type, Cardiff II variant.

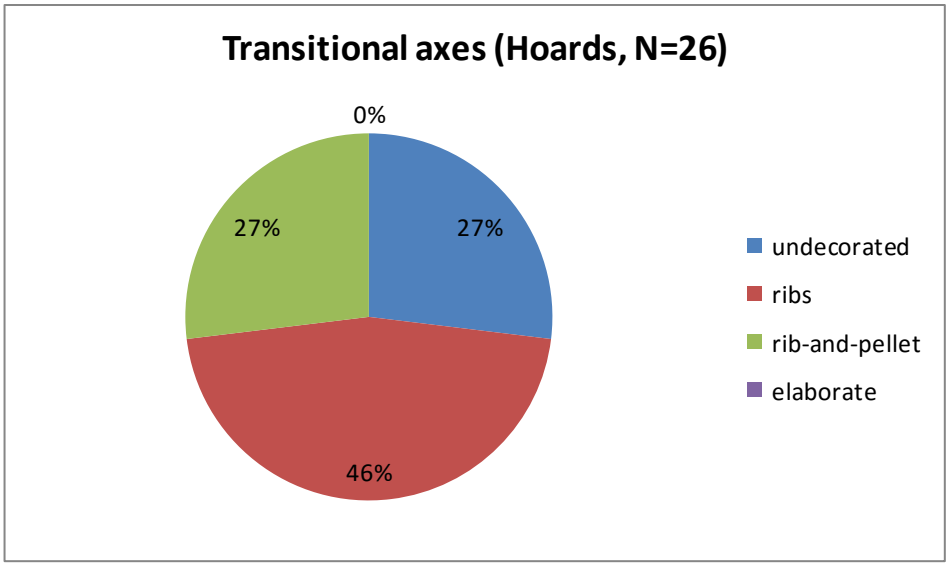


Figure 5.4: Decoration on transitional socketed axes (from hoards)

5.2.2. Transitional socketed axes: wear

Transitional axes had their casting seams removed and their blades shaped and sharpened. Only four axes showed no signs of wear (figs. 5.5+5.6). Considering their strong relationship with their Late Bronze Age forerunners, this is not surprising because Late Bronze Age socketed axes were rarely deposited in as cast condition. They are normally deposited showing some or definite signs of wear and resharpening.

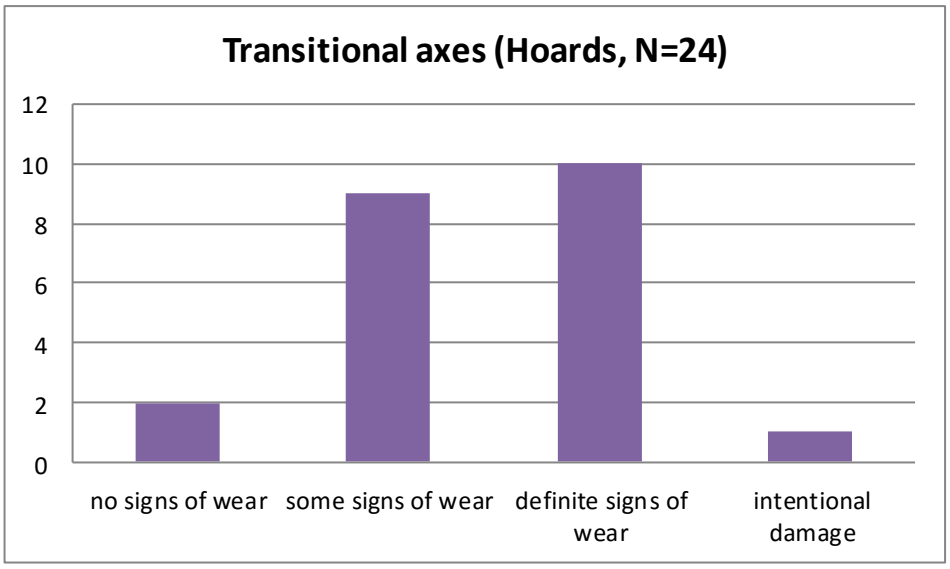


Figure 5.5: Wear analysis of transitional socketed axes from hoards (N=24)

Transitional socketed axes, too, display either some signs of wear or definite signs of wear and this bias is the same for both single and associated finds (figs. 5.5+5.6). This suggests that most of the axes were deposited after a certain length of 'service' or use rather than deposited in as-cast condition fresh from the mould. Only four axes had no marks of wear and two show signs of intentional damage: The single find from Eriswell (Suffolk, no. 975, Plate 67) has damage to its upper body and mouth while one of the axes from Llyn Fawr (Glamorgan, no. 1296, Plates 123+124) has deep nicks and cuts in its blade.

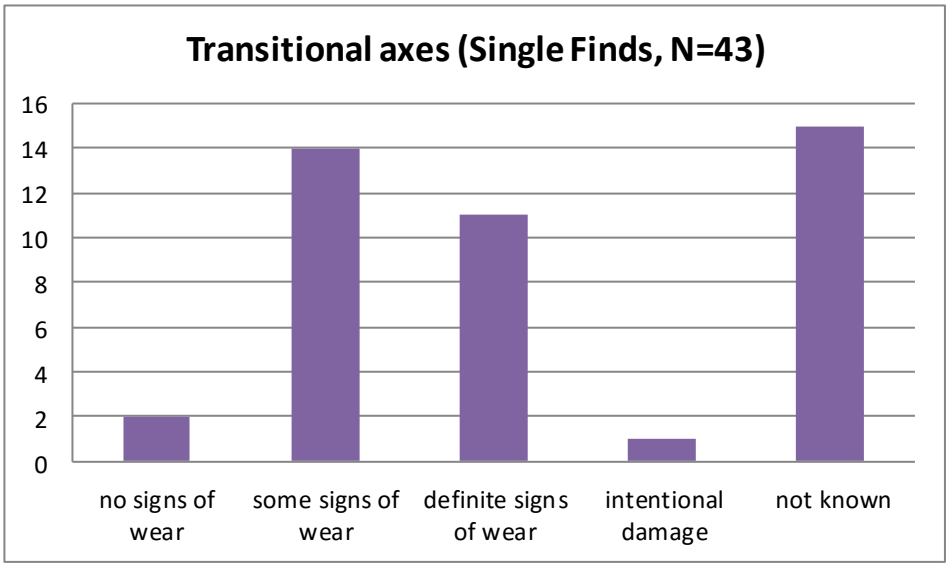


Figure 5.6: Wear analysis of transitional socketed axes, single finds (N=43)

5.2.3. Transitional socketed axes: discussion

The presence of transitional axes emphasises that there was no step or a gap between the Late Bronze Age and the Early Iron Age bronze axe industries. Early Iron Age axes were not introduced from elsewhere nor were they alien to the United Kingdom and they find their predecessors in the socketed axes of the Ewart Park metalwork assemblage of the British Late Bronze Age.

Examples for these transitional types are the small hoard of two axes from Bassingbourn, Cambridgeshire (nos. 77-78, Plate 5), a larger hoard from Wymington, Bedfordshire (nos. 1-52) and single axes found at Cullompton, Devon (no. 205) and Froxfield, Hampshire (no. 773). The small hoard from Bassingbourn includes a socketed axe of South Eastern type (no. 78), but even though the associated axe, no. 77, also appears to be of the earlier South Eastern axe shape it displays a typical Early Iron Age pellet-in-circlet decoration below the mouth mouldings which is unknown from other Late Bronze Age socketed axes.

Early Iron Age axe hoards from the Fens are small and often only include two axes, like the small hoard from Bassingbourn. The hoard from Wymington (Bedfordshire, nos. 1-52) was included as transitional because it contained only socketed axes and no other artefacts types (Kennett 1975, 5-7). Deposits containing nothing but socketed axes are prevalent in the Early Iron Age but much rarer in the Late Bronze Age, where hoards had a wide artefact range.

However, Late Bronze Age hoards are often dominated by socketed axes, as demonstrated in the hoards from Bramford (Suffolk), Norgate Road, Norwich or Hoe (both Norfolk) (Suffolk Sites and Monuments Record: BRF059; Cheetham 1977, 33+34; Thomas 1989, 281).

Figure 5.7: Example of a hoard of transitional axes: Manton Copse, Preshute, Wiltshire (nos. 1051-1060)

The best example of a transitional hoard with both Late Bronze Age and Early Iron Age elements is the small hoard from Manton Copse, Preshute, Wiltshire (nos. 1051-1060, fig. 5.7). While Thomas included the hoard in his study, O'Connor mentions it but dismisses it in his more recent list because it contained only Ewart Park material (Thomas 1989, 282; O'Connor 2007, 76). However, even though the ten axes are of Late Bronze Age types, the composition of the hoard and condition of the axes suggests that it was deposited in the Late Bronze/Early Iron Age transition period. The hoard consists solely of socketed axes and includes one mould group of three axes and another of two axes. The remaining five axes were made in different moulds. Socketed axes made from the same moulds or mould templates are rare in Late Bronze Age hoards, but occur often in Early Iron Age hoards, especially those of Sompting type, especially variants Figheldean Down and Tower Hill (Northover 2003, 222-223).

5.3. Early Iron Age Axe Types

5.3.1. Sompting type: Overview

Some confusion has surrounded *what* exactly 'Sompting Type' axes are. To avoid further misunderstanding, Burgess' initial definition of the type will be quoted here in full. According to Burgess, Sompting type axes have

> "…sides [that] tend to be fairly straight, diverging to an unexpanded, or moderately expanded blade which is often straight-edged. The profile is heavy and pronounced, generally biconical in profile… their loops tend to be quite small but broad, and often have a distinctive 'spurred' base which is peculiar to this socketed axe form. The socket is sometimes square, but is more often sub-rectangular and disposed in a distinctive 'back-to-front' plan, with the long axis at right angles to the cutting edge, instead of parallel to it in normal socketed axe fashion. This results from the axe being relatively narrow of face and broad at the sides. We can call this form of socketed axe after the hoard from Sompting, Sussex, in which plain, simple ribbed and decorated versions are well represented." (Burgess 1971, 268)

However, the small number of socketed axes Burgess (1971) included in his discussion are not representative of the type and some alterations of the definition must be made.

The definition is true for Burgess' three examples from Yorkshire (Seamer Carr, no. 1236; Cayton Carr, no. 1223 and Broughton, no. 1221; Plates 103+105) and axes 1-4 and 7 from the Sompting hoard (nos. 1011-1014+1025; Curwen 1948, pl. XX, nos. 1-4,+7). However, the remaining axes from the Sompting hoard do not show the straight, almost parallel sides. In contrast to Burgess' definition their cutting edges are widely splayed and curved.

Schmidt and Burgess attempted a re-assessment of the Sompting type when they published their volume on axes from Northern England and Scotland in the Prähistorische Bronzefunde series in 1981. However, most Sompting type axes come from the Midlands, Southern and Eastern England and the Thames Basin (Schmidt and Burgess 1981, 241-247). Schmidt and Burgess' variants Gembling and Roseberry Topping are problematic because the hoard from

Figure 5.8: Gembling, North Yorkshire (no. 1226)

Roseberry Topping (North Yorkshire) is a typical Late Bronze Age assemblage and none of the artefacts in the hoard show any affinities to Early Iron Age metalwork. The Roseberry Topping mould produces simple ribbed axes of which there is a specimen in the hoard (Schmidt and Burgess 1981, no. 1632), but it bears more similarities to Late Bronze Age socketed axes of ribbed South Eastern type rather than Sompting axes (Schmidt and Burgess 1981, Plate 148 D). A similar problem arises with Schmidt and Burgess' second variant, Gembling (Schmidt and Burgess 1981, no. 1645). The axe from Gembling bears no resemblance to the larger corpus of Sompting axes (Schmidt and Burgess 1981, nos. 1405 and 1632). This axe, too, shows more affinities with Late Bronze Age axes of the faceted type and has been included in this study as one of the transitional axes discussed above, and not a fully developed Early Iron Age axe (no. 1226, fig. 5.8). Schmidt and Burgess compare axes of Gembling type with axes found in Dorset and Norfolk (identified below as Portland and East Rudham types) because of their small size and unique shape and decoration. However, Portland and East Rudham type axes are very different from Burgess and Schmidt's Gembling axes (Schmidt and Burgess 1981, 247).

Thus, at a closer investigation, Schmidt and Burgess' division of the Sompting type is problematic because of the inadequate material available for investigation in the 1970s and the geographical area they chose to study (Northern England and Scotland). The number of Sompting axes from the southern and eastern England is not only greater, but also more diverse. More

recent finds of Early Iron Age axes of Sompting type include Tower Hill (Oxfordshire, nos. 932-953), Mylor (Cornwall, nos. 147-179) and Ulverston (Cumbria, nos. 1395-1397).

Schmidt and Burgess' definition of Sompting axes includes all large, decorated Late Bronze Age, Early Iron Age or transitional axes which cannot be assigned to Armorican or Late Bronze Age types. However, Sompting type axes differ in many ways from Late Bronze Age and other Early Iron Age socketed axes. 245 Sompting type axes could be identified for this corpus and subtypes defined based on their decoration. The wealth of patterns both simple and more and less elaborate on these heavy axes is striking and cannot be matched on axes of the preceding Ewart Park metalwork assemblage.

5.3.2. Sompting type: Variants

Sompting axes do not only stand out because of their sometimes elaborate decoration. In addition to their ornament, they possess other striking and unique features that supported their subdivision into variants, such as size (length and width), width and shape of the blade, socket shape and weight. When defining Sompting variants in the first instance this research has given these more basic features preference over ornament.

Figure 5.9: The hoard from Kingston, Surrey (nos. 988-991)

However, the variants which were suggested by size, weight and mouth shape were then secondly examined to ascertain if certain variants had a preference for a

certain ornament. The shape of the socket has significance for dating and to sub-divide Sompting axes into different variants.

A large number of socketed axes are now categorised as Sompting axes and so the following section will describe Sompting axes in four variants, including notes on both their wear and decoration.

5.3.2.1. Sompting type, Kingston variant

The first variant has been named after the Kingston hoard (Surrey, nos. 988-991, fig. 5.9), because three of its four axes can be classified as Sompting type, Kingston variant (nos. 989-991; no. 988 is of Sompting type, Tower Hill variant). The Kingston hoard is significant because it is small but very similar to the Sompting hoard. These two hoards are the only assemblages which include plain (Style 1), simply ribbed (Style 2), elaborately ribbed (Style 3) and elaborately decorated (Style 4) socketed axes of the both Kingston and Tower Hill variants (Styles 1-4, fig. 5.17). Apart from the Kingston variant axes in the Kingston hoard (nos. 989-991), one axe in the Poolewe hoard (Ross and Cromarty; nos. 1275-1279) and most of the axes from the two Cumbrian hoards from Skelmore Heads and Ulverston (nos. 193-198; nos. 1395-1397) all other finds of axes of the Kingston variant have been single finds (figs. 5.10+5.14).

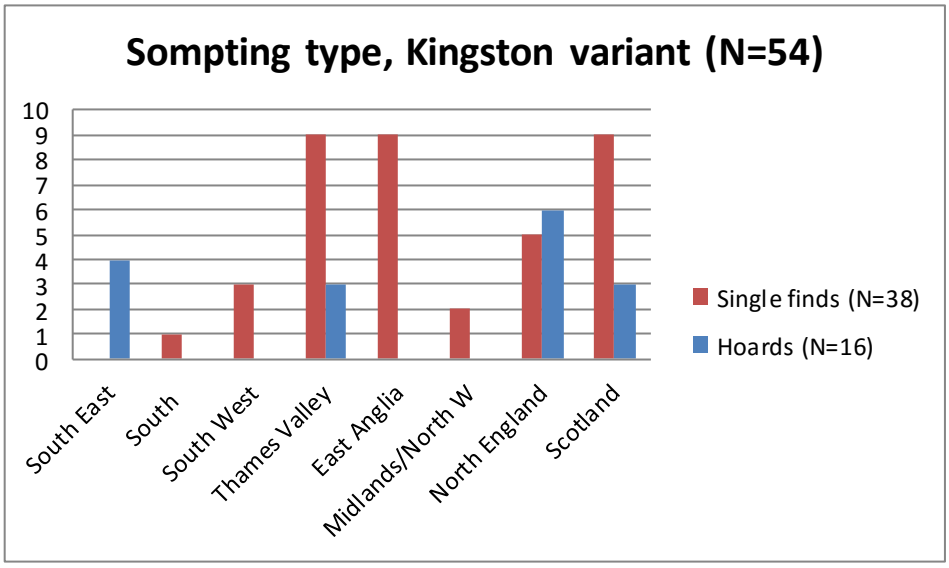


Figure 5.10: Distribution of Sompting type, Kingston variant axes

Most single finds of Kingston variant axes come from the Thames Valley and East Anglia, but there is also a significant number of finds from Northern England and Scotland. Most hoards are known from the North (fig. 5.10).

Similar to the other three variants of Sompting axes, the socketed axes of the Kingston variant are large, heavy specimens displaying various patterns of more or less elaborate rib-and-pellet/circlet decoration. They are much heavier than socketed axes of the preceding Ewart Park metalwork assemblage and also tend to have a square or sub-rectangular socket ('back-to-front', i.e. a socket/mouth ratio <1). Their weight usually lies between 300g and 500g and their length between 11cm and 13cm.

5.3.2.2. Sompting type, Kingston variant: Decoration

Sompting axes of the Kingston variant often show a very elaborate decoration, but there are also plain examples (e.g. no. 908: Marsham, Norfolk) and those with only ribs (e.g. no. 1015: Sompting, Sussex) or rib-and-pellet decoration (e.g. no. 914: Stalham, Norfolk).

However, there are much fewer axes from the last three categories: more than 50% of Kingston variant axes show an elaborate decoration unseen on other British Late Bronze Age or Early Iron Age axe types (fig.5.11+5.12).

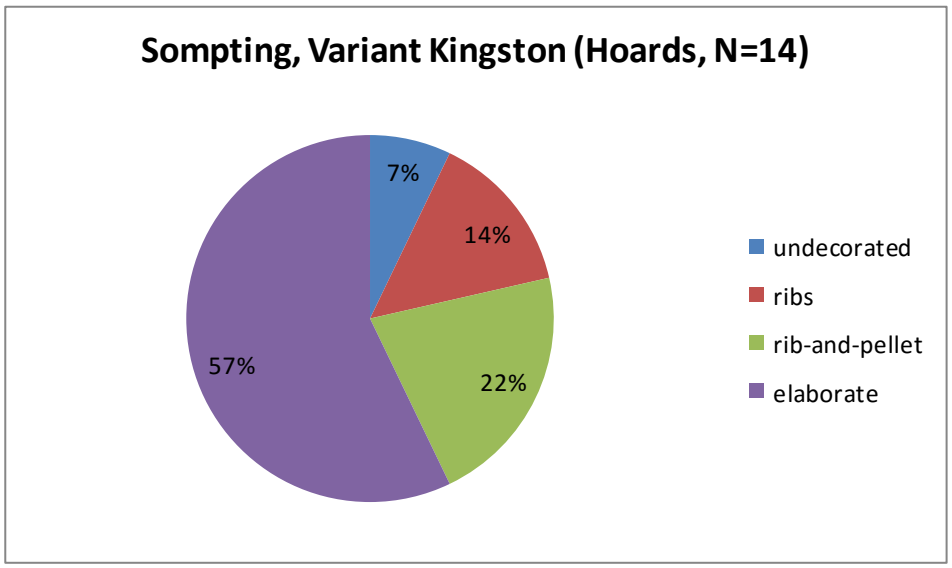


Figure 5.11: Decoration on Sompting type, variant Kingston axes from hoards

While Style 3 clearly dominates, there are only two plain Style 1 specimens amongst Kingston variant. It is also important to note that the great majority of Kingston variant axes are unique. Even though a pattern may recur, the axe will generally have come from a different mould. The exceptions are four axes (two from two hoards and a single find from Scotland, nos. 193, 1395, 1396 and 1245) which have almost certainly been made in the same mould.

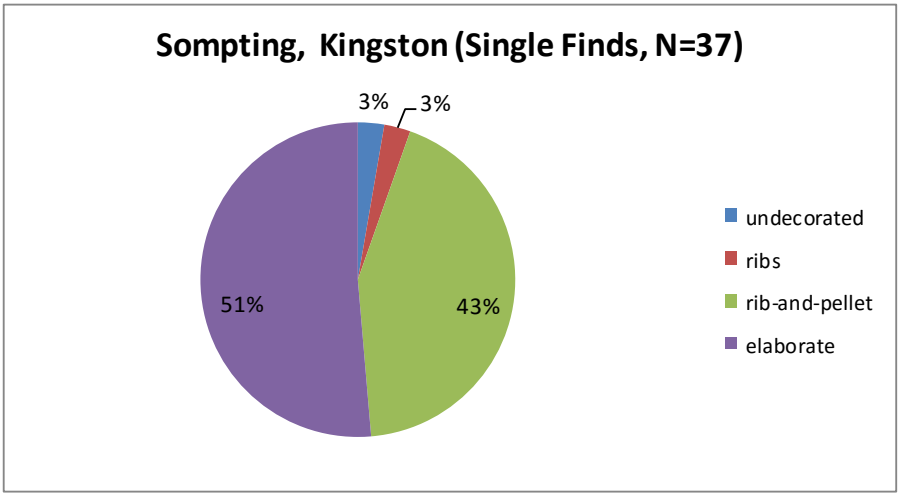


Figure 5.12: Decoration on axes of Sompting type, Kingston variant (single finds)

5.3.2.3. Sompting type, Kingston variant: Wear

The wear visible on Sompting axes of Kingston variant is similar to the transitional type. The axes of both types were deposited predominantly showing signs of wear but only very rarely show intentional damage (fig. 5.13). Most axes of Kingston variant were single finds (fig. 5.14+5.15).

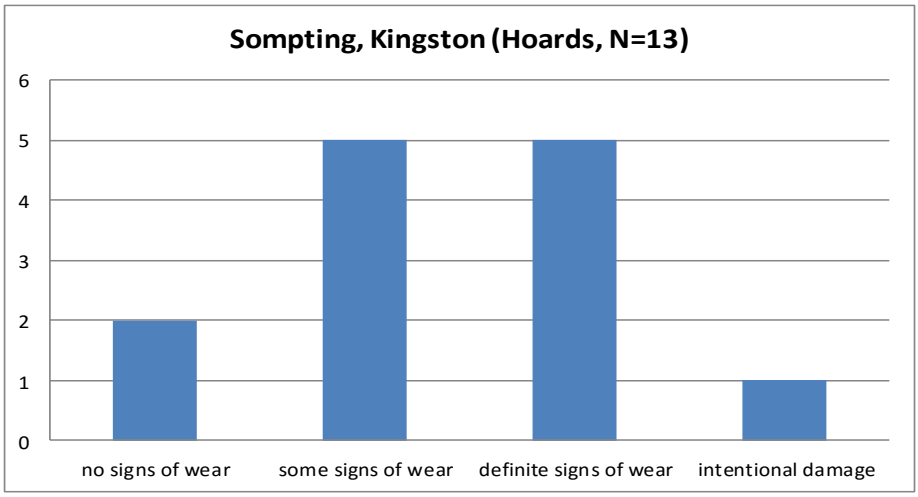


Figure 5.13: Wear analysis of Kingston variant axes (hoards)

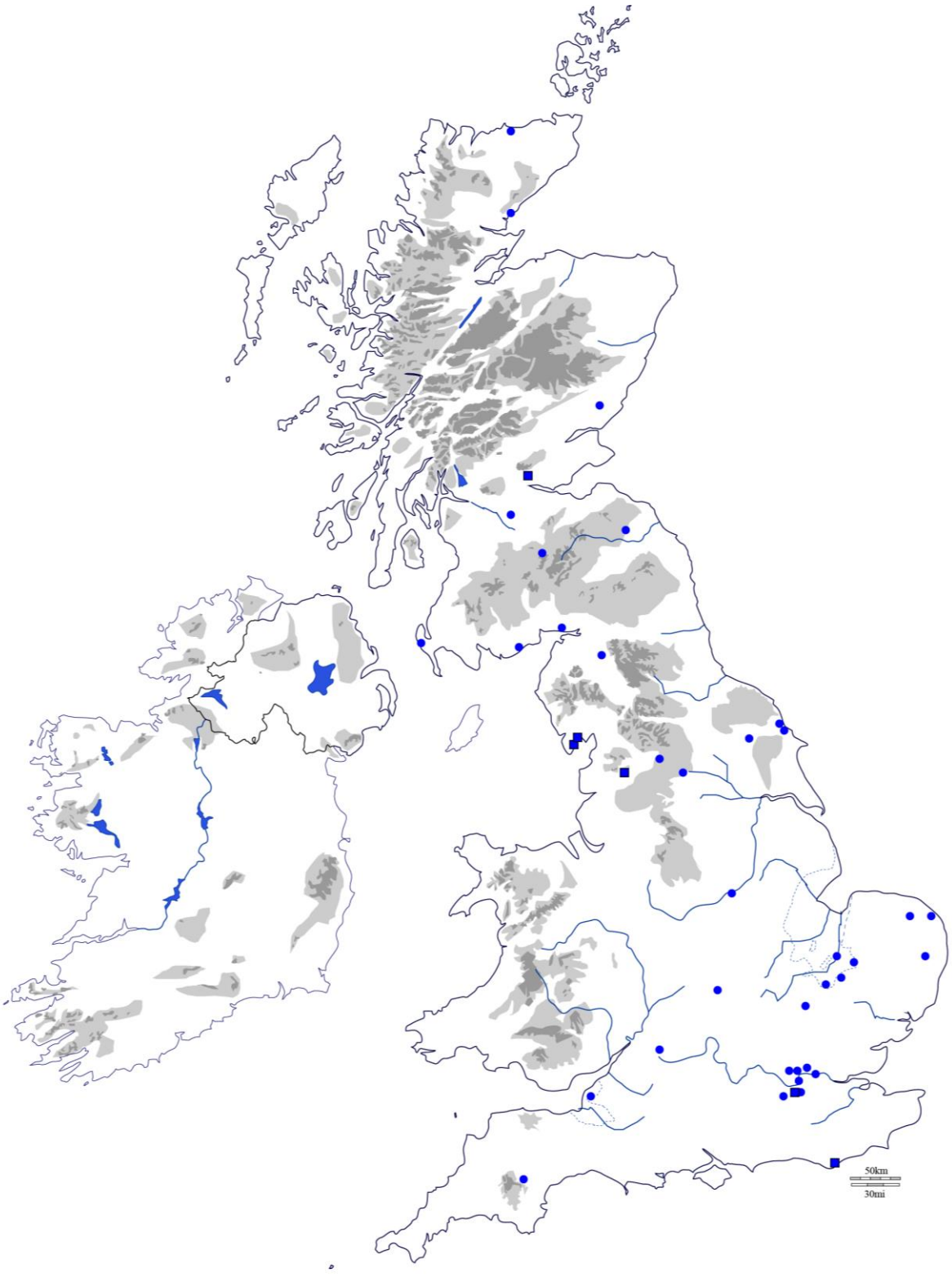


Figure 5.14: Distribution of Sompting type, Kingston variant socketed axes (■ Hoards; ● Single finds)

It seems that, of all the axe types and their variants, Kingston variant axes are the ones that are most closely related to transitional axes. They show the greatest variation in style and with most of their blades also showing some evidence or definite evidence for wear, they must have been used as cutting tools, unlike most axes of Tower Hill and Figheldean Down variants.

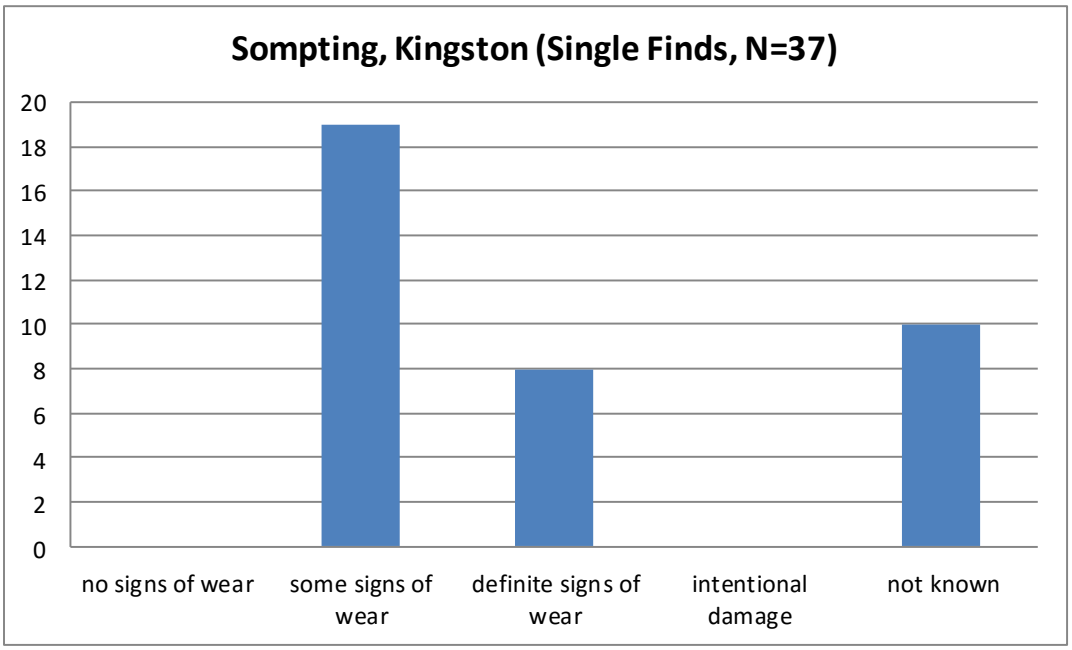


Figure 5.15: Wear analysis of variant Kingston axes (single finds)

5.3.2.4. Sompting type, Tower Hill variant

As indicated above, Tower Hill variant axes are closely related to axes of the Kingston variant. They have been named after the hoard found at Tower Hill (Ashbury, Oxfordshire: nos. 923-953, Plates 49-61; Coombs *et al*. 2003, 203-225). This hoard included 22 complete socketed axes, 21 of which displayed the form and shape of socketed axes of the 'Tower Hill variant'. Single finds of socketed axes of Tower Hill variant are evenly spread over England, although they are much less common in the South East and South West (figs. 5.16+5.18).

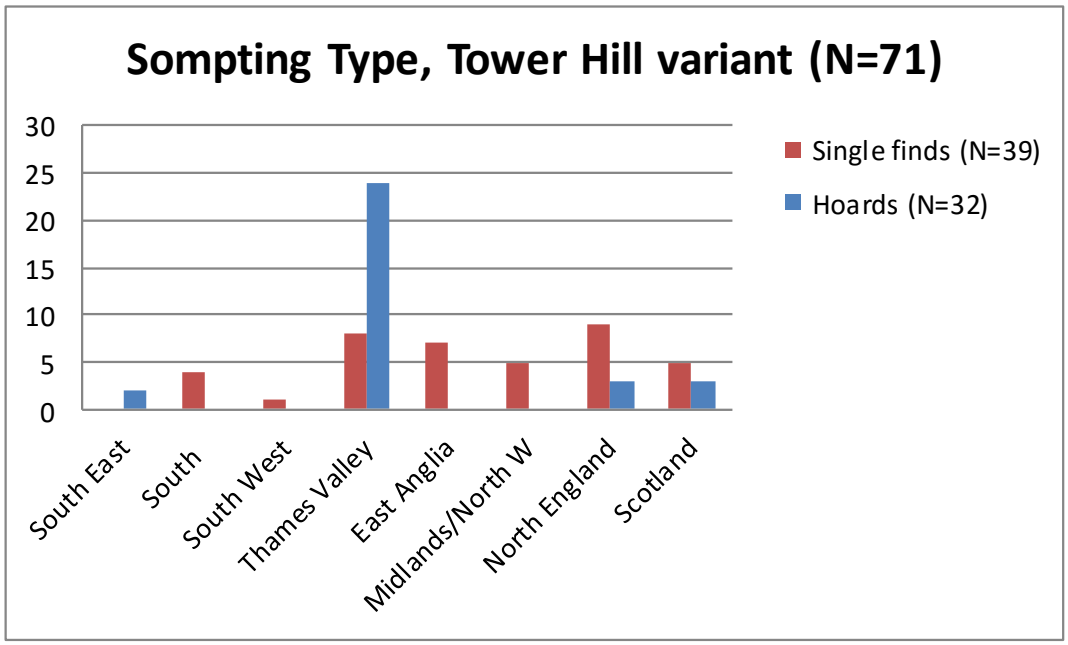


Figure 5.16: Distribution of Sompting type, Tower Hill variant axes

Like the other Sompting variants, Tower Hill axes are large and heavy with an overall length between 11cm and 13cm and a weight between 300g and 500g (fig. 5.19). Very similar to Kingston axes, their mouth ratio lays around 1 or slightly above 1 which means that their sockets are either square, or, more often, sub-rectangular ('back-to-front'). However, they can be separated from Kingston axes by their blade width which lies between 6cm and 7cm (Kingston axes are 5.5-6.5cm). The comparatively small width of the upper area of their faces just below the mouth mouldings emphasizes the widely splayed blade.

There are 34 specimens in this variant and almost all of the axes are undecorated. Using the same classification as for Kingston variant axes, one arrives at the following style distribution (fig. 5.17):

	Kingston	**Tower Hill**
Style 1:	**2**	**25**
Style 2:	**2**	**5**
Style 3:	**9**	**1**
Style 4:	**8**	**3**

Figure 5.17: Comparison of styles

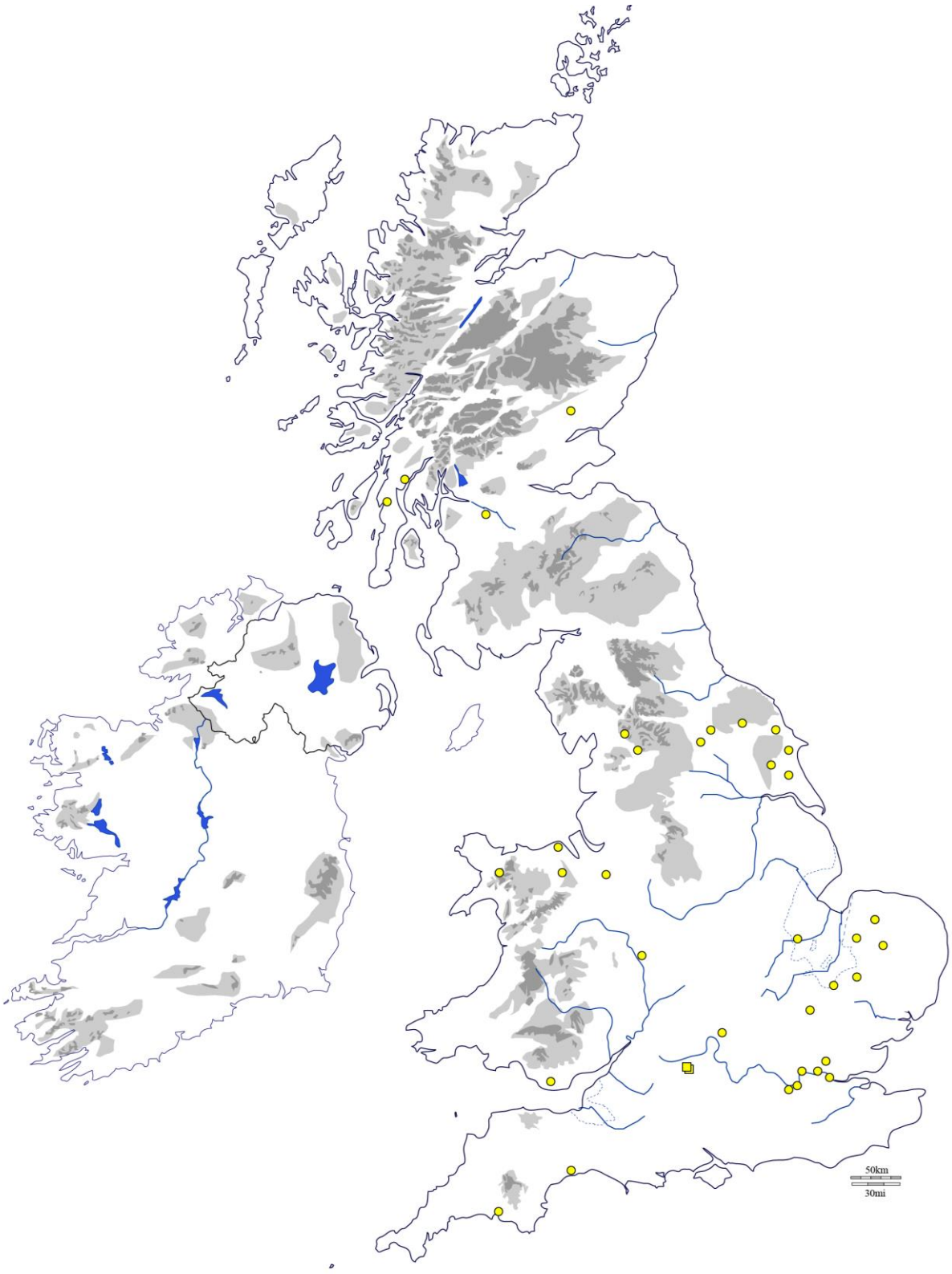


Figure 5.18: Distribution of Sompting type, Tower Hill variant axes (■ Hoards; ● Single finds)

5.3.2.5. Comparison of Styles 1-4 on Kingston and Tower Hill axes

Figure 5.19: Tower Hill variant axe from the Skelmore Heads Hoard (Cumbria, no. 198)

Kingston variant axes are mostly decorated and rarely plain and Tower Hill axes are mainly plain and only very rarely ornamented (fig. 5.17).

However, it should be mentioned that the style distribution is, of course, heavily influenced by the axes that come from the Tower Hill Hoard itself: Of the 34 Tower Hill axes 22 come from this hoard (20 are Style 1, 2 are Style 2). It would be possible to look at Tower Hill axes as a 'sub-type' of Kingston axes or *vice versa*. However, most of the Tower Hill axes come from one hoard and most of the Kingston axes are single finds so were treated differently in antiquity.

5.3.2.6. Sompting type, Tower Hill variant: Wear analysis

The wear found on Tower Hill axes is notably different to the wear on axes of variant Kingston (figs 5.20+5.21). While most axes of the Kingston variant shows definite signs of use, many of the axes of Tower Hill variant do not show any evidence for use or resharpening. They only have marks which are clear evidence of the last stages of the production process, i.e. evidence of working, annealing and sharpening of the blade. They were never finished for subsequent work, but they were deposited after at least some post-casting work.

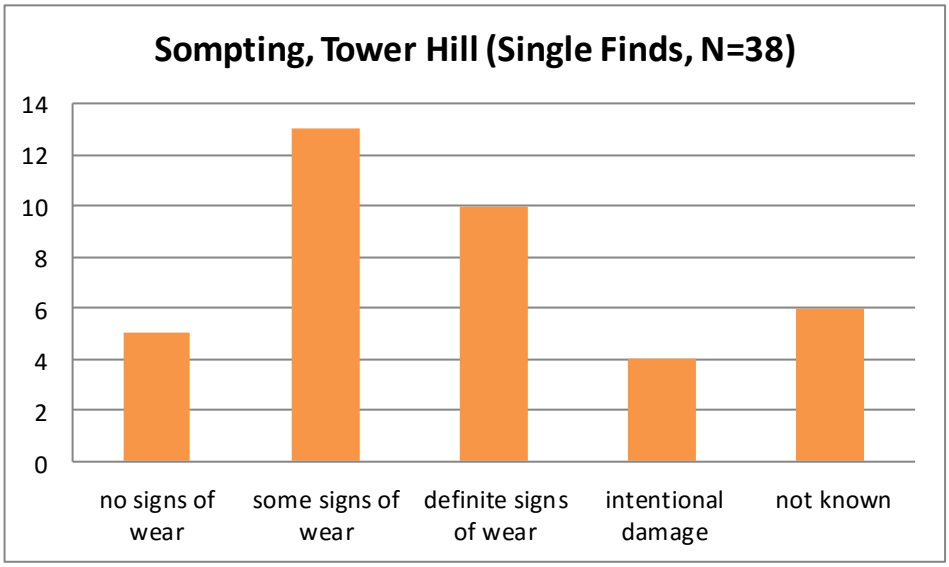


Figure 5.20: Degree of wear on Sompting type, Tower Hill variant (single finds)

Some of them showed hammer marks on the lower part of the blade and evidence for the removal of some of the casting seams (Plates 50-55).

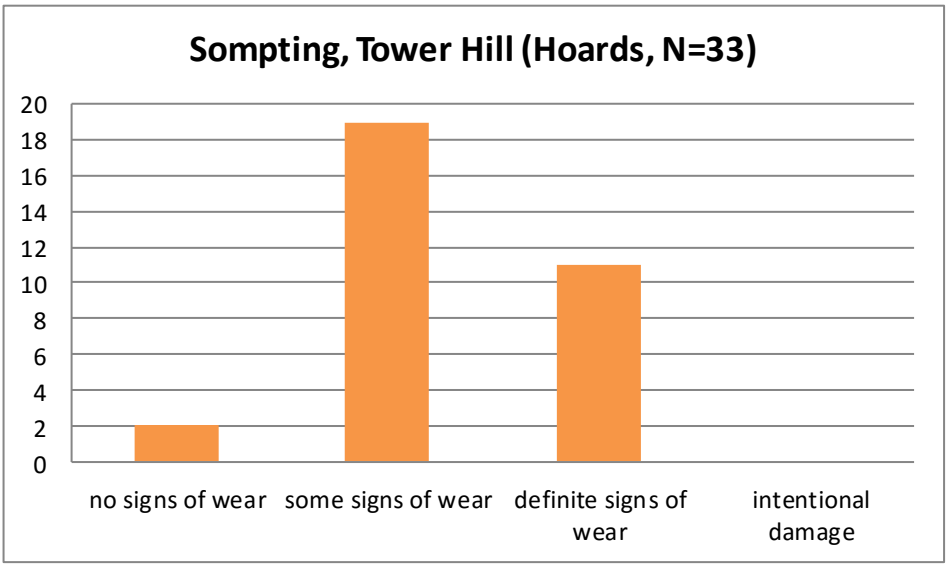


Figure 5.21: Degree of wear on Sompting type, Tower Hill variant (part of hoard)

5.3.2.7. Sompting type, Tower Hill variant: Technology and metalwork composition

Most Tower Hill axes were not found in unfinished condition, but instead with their casting seams were removed and their blades re-shaped and re-worked.

Tower Hill type axes were usually heavy implements with sub-rectangular mouth mouldings, narrow sockets and widely splayed, crescent-shaped blades. Almost all of them are undecorated.

Most of the objects from the Tower Hill hoard were cast from low tin and low to medium lead bronzes. In his metallurgical analysis of the axes, Northover concluded that components of the Tower Hill bronzes show a very broad distribution, with an outline that suggests the overlapping of two separate distributions, one with a mode of about 4% tin, and another with 6-7% tin. Furthermore, Northover concludes that there is a small group of higher tin bronzes at 12% and above (Northover 2004, 3). With an overall lead content of $\leq$ 3% it appears that the metal composition is different from more heavily leaded bronzes of the Ewart Park period and this also suggests that the Tower Hill axes were most probably not cast from Ewart Park scrap.

Northover suggests that the axes were cold hammered and annealed around the blade, which makes it likely that the axes were designed for use despite their low tin contents (Northover 2004, 9). This metallurgical evidence is confirmed by the appearance of the other re-worked, used and re-sharpened axes of the Tower Hill variant (for example nos. 85 and 993 from Bottisham Lode, Cambridgeshire, and the Thames at Thames Ditton; Plates 8 and71).

5.3.2.8. Sompting type, Cardiff II variant

The third variant of the Sompting Type was named after the socketed axe from the Cardiff II/Leckwith hoard (Glamorgan: no. 1292, fig. 5.23). It is related to Figheldean Down variant in much the same way as Tower Hill variant is related to Kingston variant.

The axes of Cardiff II variant usually weigh between 400g and 500g and their length lies between 12.2cm and 13.5cm. The mouth ratio is either 1 or just above 1 which means that the sockets are either square or sub-rectangular.

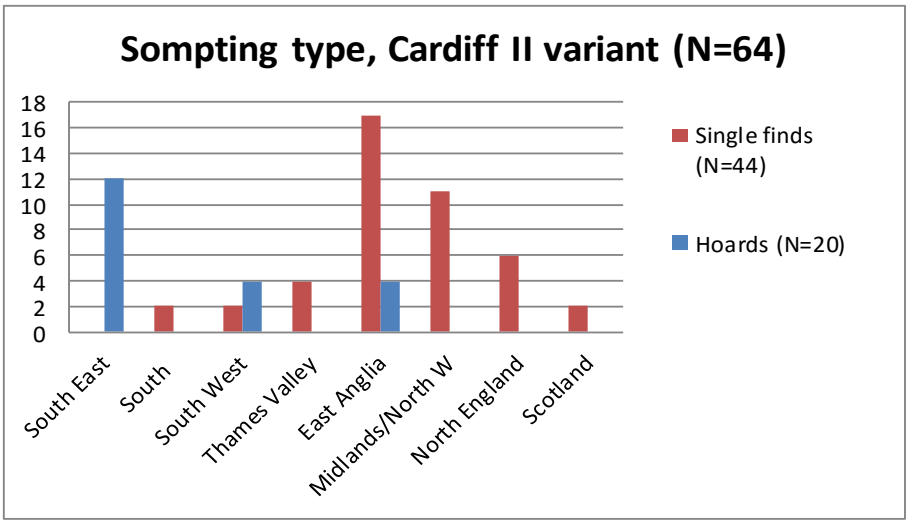


Figure 5.22: Distribution of Sompting type, Cardiff II variant axes

The most prominent characteristic of Cardiff II axes, however, is that they are predominantly decorated with variations of the rib-and-pellet/rib-and-circlet/rib-and-dot pattern. Most Style 3 Cardiff II axes bear a simple rib-and-pellet decoration (fig. 5.23).

Figure 5.23: Cardiff II variant axe from the Cardiff II hoard (Glamorgan, no. 1293)

Although Cardiff II variant is named after an axe from a hoard, most of the axes are single finds (figs. 5.22+25). The only exceptions are the two axes forming the small hoard from Quy Fen (Cambridgeshire: nos. 79-80, Plates 5-6) and a possible association between the two axes from Mildenhall (Suffolk, nos. 971-972, Plates 64-65).

5.3.2.9. Sompting type, Cardiff II variant: Wear analysis

Over half of these axes showed limited signs of wear. However, compared to the Tower Hill variant, Cardiff II axes showed much more wear and tear (fig. 5.24 and 5.26). While most of the Tower Hill axes did not make it further than the first stages of post-casting work, most Cardiff II axes have had their casting seams removed and flattened, their blades sharpened and there is evidence for use, reuse and re-sharpening.

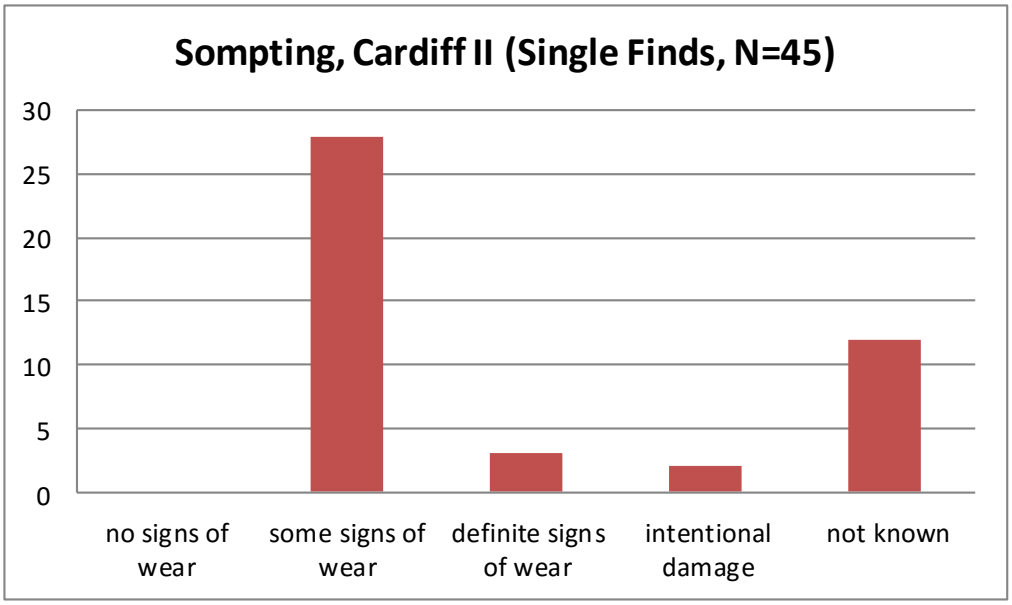


Figure 5.24: Degree of wear: Sompting type, Cardiff II variant (single finds)

One axe of this type was damaged intentionally prior to deposition (no. 909: Methwold, Norfolk, Plate 47). It was effectively rendered useless by several blows to the cutting edge with another tool, probably another socketed axe.

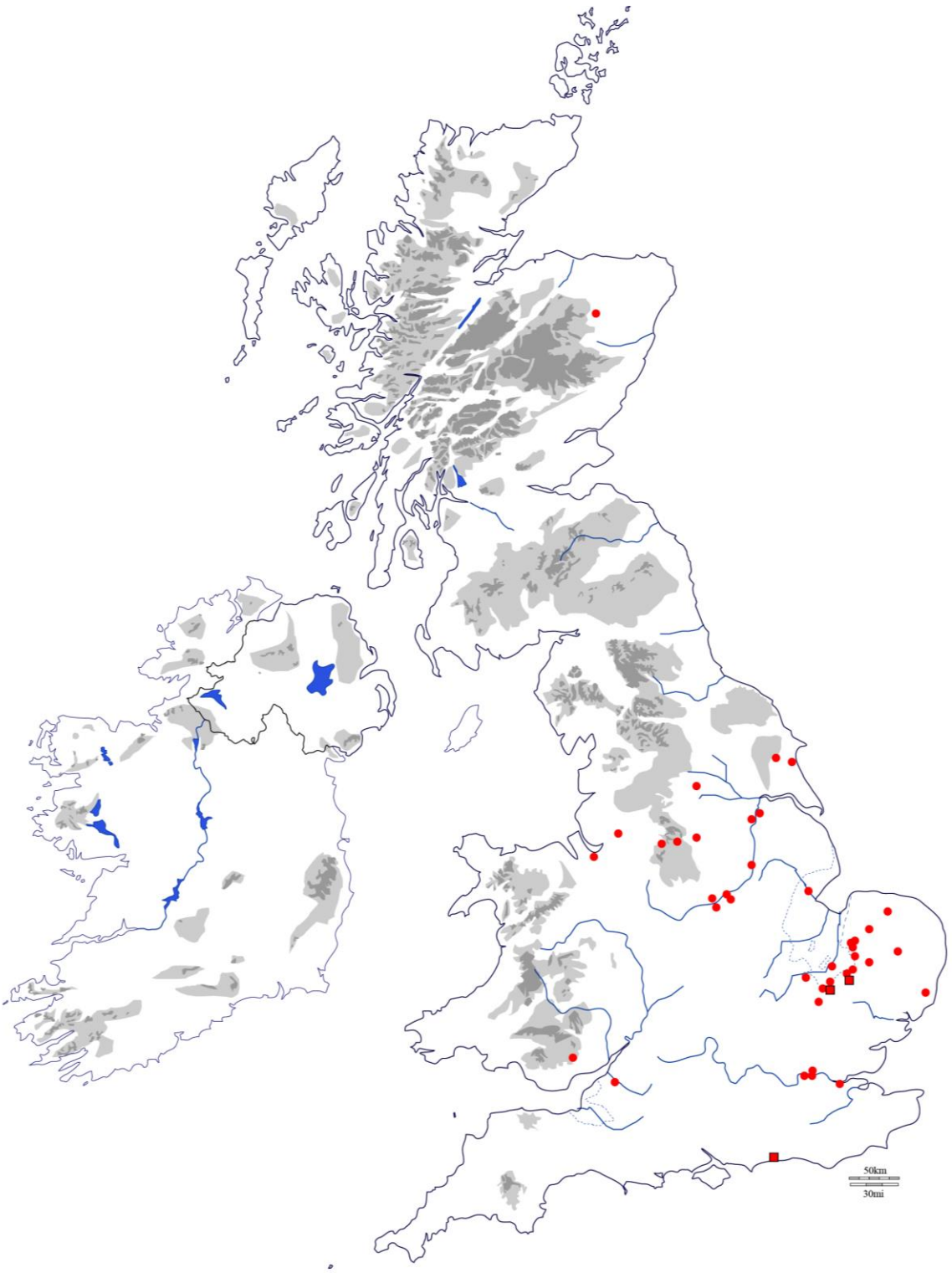


Figure 5.25: Distribution map of Sompting type, Cardiff II variant axes (■ Hoards; ● Single finds)

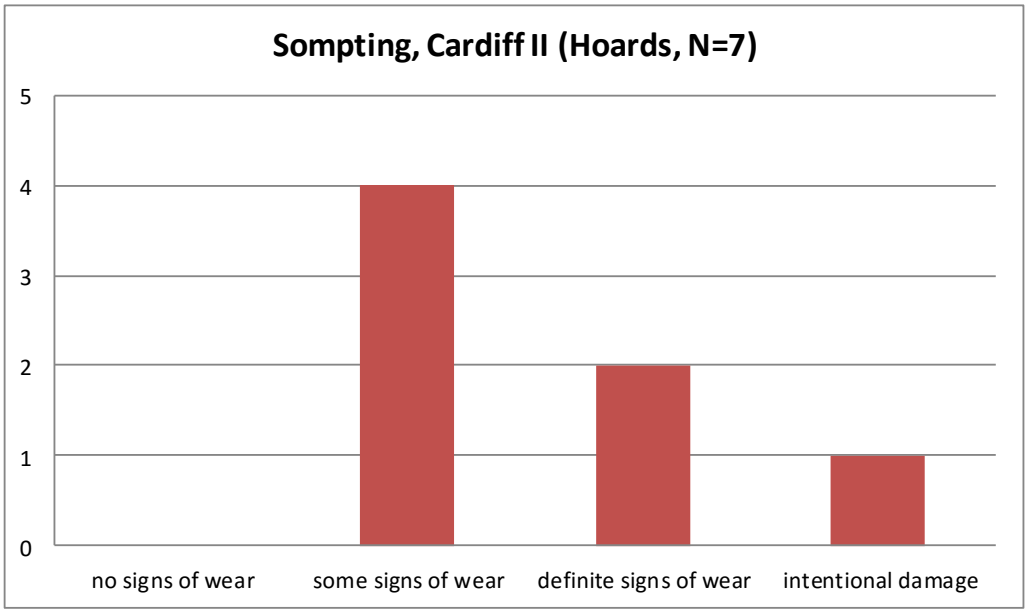


Figure 5.26: Degree of wear: Sompting type, Cardiff II variant: part of hoard

Most Cardiff II axes were single finds and not part of hoards (figs. 5.23+5.25). Unfortunately metallurgical analysis has not been carried out on these finds.

5.3.2.10. Sompting type, Figheldean Down variant

Figure 5.27: Figheldean Down variant (Kingston on Thames, no. 992)

The last of the Sompting variants is the Figheldean Down variant, named after the hoard from the Army Base at Tilshead, Figheldean Down (Wiltshire; nos. 1029-1050, Plates 78-87). As was the case with the Tower Hill hoard and the Tower Hill variant, the Figheldean Down variant is represented almost wholly within the Figheldean Down Hoard.

As suggested above, Figheldean Down variant is related to Cardiff II variant and that relationship becomes apparent when comparing their similar size and weights.

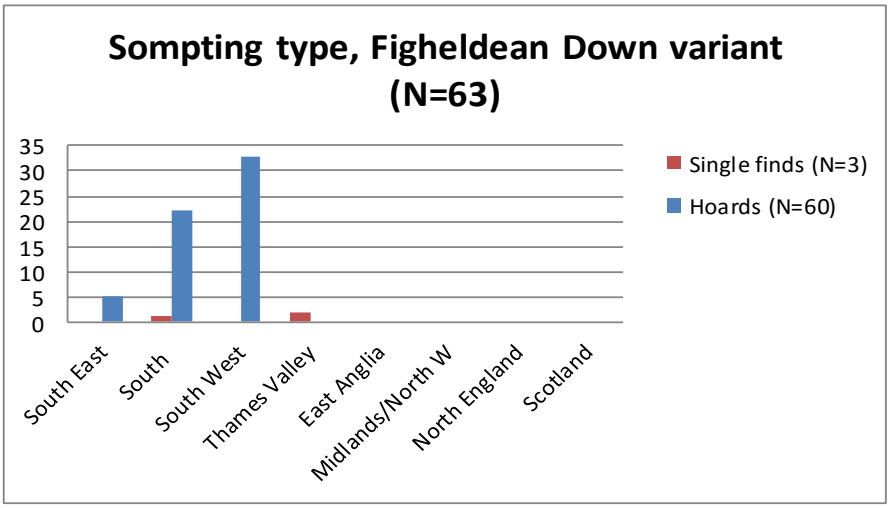


Figure 5.28: Distribution of Sompting type, Figheldean Down variant socketed axes

Axes of Figheldean Down variant weigh approximately 400-500g and their length usually lies between 12.5cm and 14cm, meaning that they are somewhat longer than the axes of Cardiff II variant while having approximately the same weight. Like axes of Cardiff II variant they generally have square mouths. However, they also have sub-rectangular sockets, which again links them to Cardiff II axes and is also not as developed as in axes of Tower Hill variant. The Cardiff II and Figheldean Down axes most notably differ in their decoration (fig. 5.29). Axes of Figheldean Down variant have a distinctly southern distribution (figs. 5.28+5.32).

	Cardiff II	**Figheldean Down**
Style 1:	**1**	**0**
Style 2:	**1**	**20**
Style 3:	**25**	**5**
Style 4:	**0**	**1**

Figure 5.29: Comparison of Styles 1-4 on axes of Cardiff II and Figheldean Down types

5.3.2.11. Sompting type, Figheldean Down variant: Wear analysis

The socketed axes that are labelled as Variant 'Figheldean Down' differ from other Sompting variants in so far that only very few were found singly.

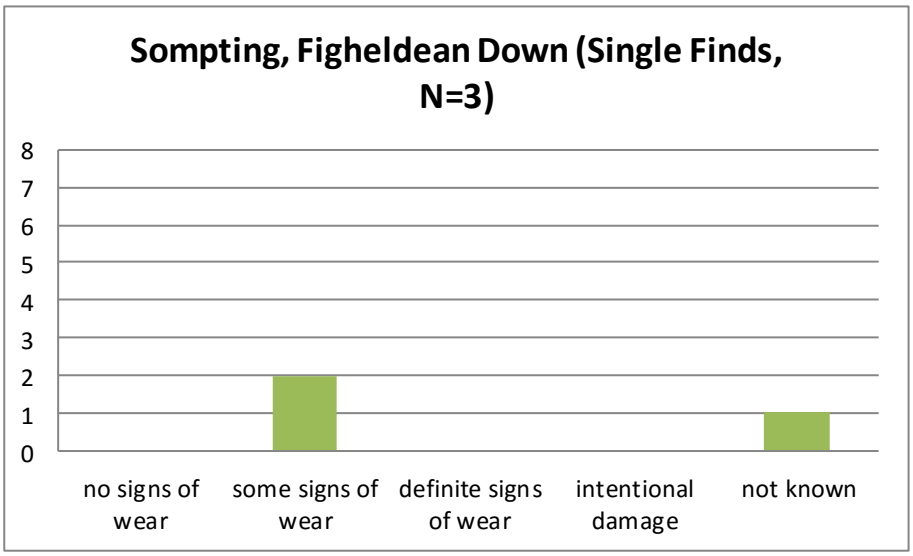


Figure 5.30: Degree of wear: Sompting type, Figheldean Down variant: single finds

Furthermore, most of them were deposited in as-cast or nearly as-cast condition: 19 axes had come straight from the mould before they were deposited and another 32 showed evidence of only very limited use and re-sharpening (figs. 5.30+5.31).

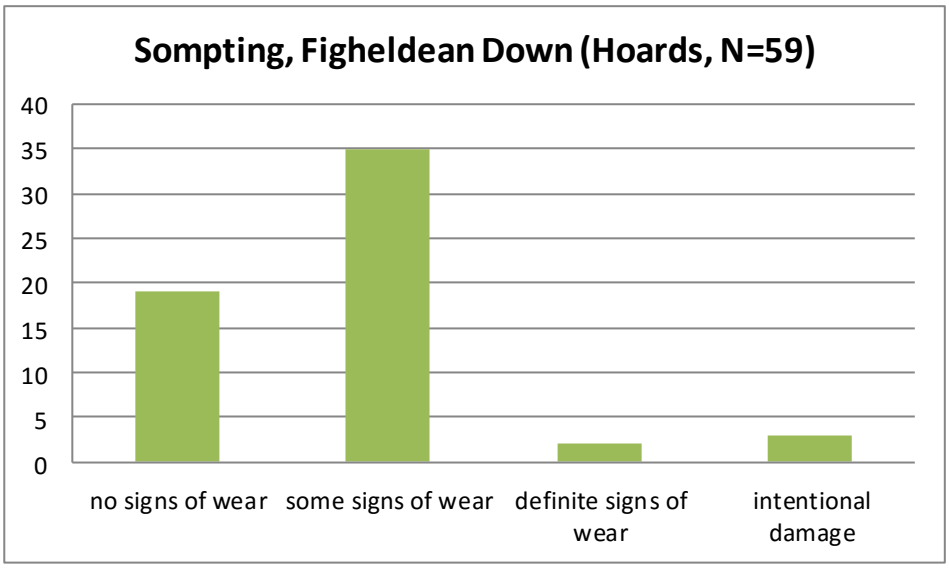


Figure 5.31: Degree of war: Sompting type, Figheldean Down variant (part of hoard)

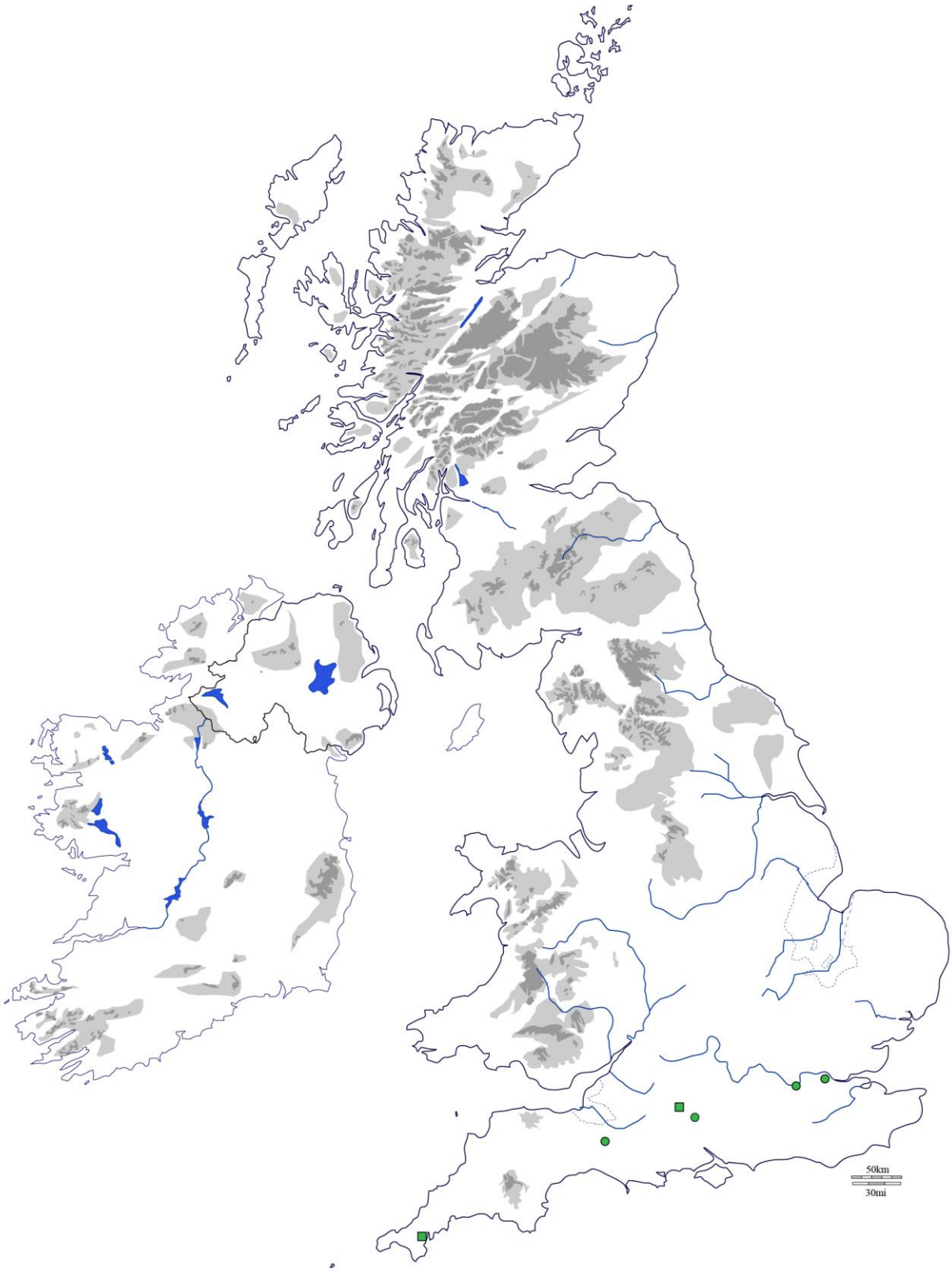


Figure 5.32: Distribution map of Sompting type, Figheldean Down variant axes (■ Hoards; ● Single finds)

This is a peculiarity already noted by Coombs who suggested that many Sompting axes from hoards (such as Sompting (West Sussex) and Figheldean Down (Wiltshire)) were in 'as-cast' state, unsharpened and not finished (Coombs 1979, 253). However, this is only true for Figheldean Down axes and about three quarters of Tower Hill axes. The majority of Cardiff II and Kingston axes showed clear signs of wear.

5.3.2.12. Sompting type, Figheldean Down variant: Technology and metalwork composition

Like Portland axes (see below), Figheldean Down axes were made of an alloy composed of ca. 11.45-22.96% tin and 7.3-11.6% lead (Northover 1987, 36-37). When Coombs published the Figheldean Down hoard in 1979, he compared the axes from Figheldean Down to those from the hoard found at Sompting (East Sussex): most of the axes in both hoards were found in as-cast condition, unsharpened and unfinished (Coombs 1979, 253). However, we know now that this is not true for Sompting axes in general, and the axes from Figheldean Down make up a variant of their own. This is best seen when comparing the metallurgy of two groups of Figheldean Down and Tower Hill axes from the two eponymous hoards: while Tower Hill axes were cast from unleaded or low-leaded bronze with diverging sides as well as widely splayed, crescent-shaped cutting edges, Figheldean Down were cast from high-lead/high-tin bronze, with almost parallel sides and a very narrow cutting edge.

Metallurgical analysis shows that Tower Hill axes were made from low tin bronze, while the composition of Figheldean Down suggests that they were made from scrap metal, possibly Portland and Armorican type axes (considering the high percentages of lead and tin), Portland type axes possibly contributing a little more than Armorican axes (Northover 2004, 7).

The tendency to a higher lead content in the axes from Figheldean Down as well as their un-finished state when deposited also relates them to other non-utilitarian axe types, such as Armorican and Portland axes rather than to other Sompting type axes.

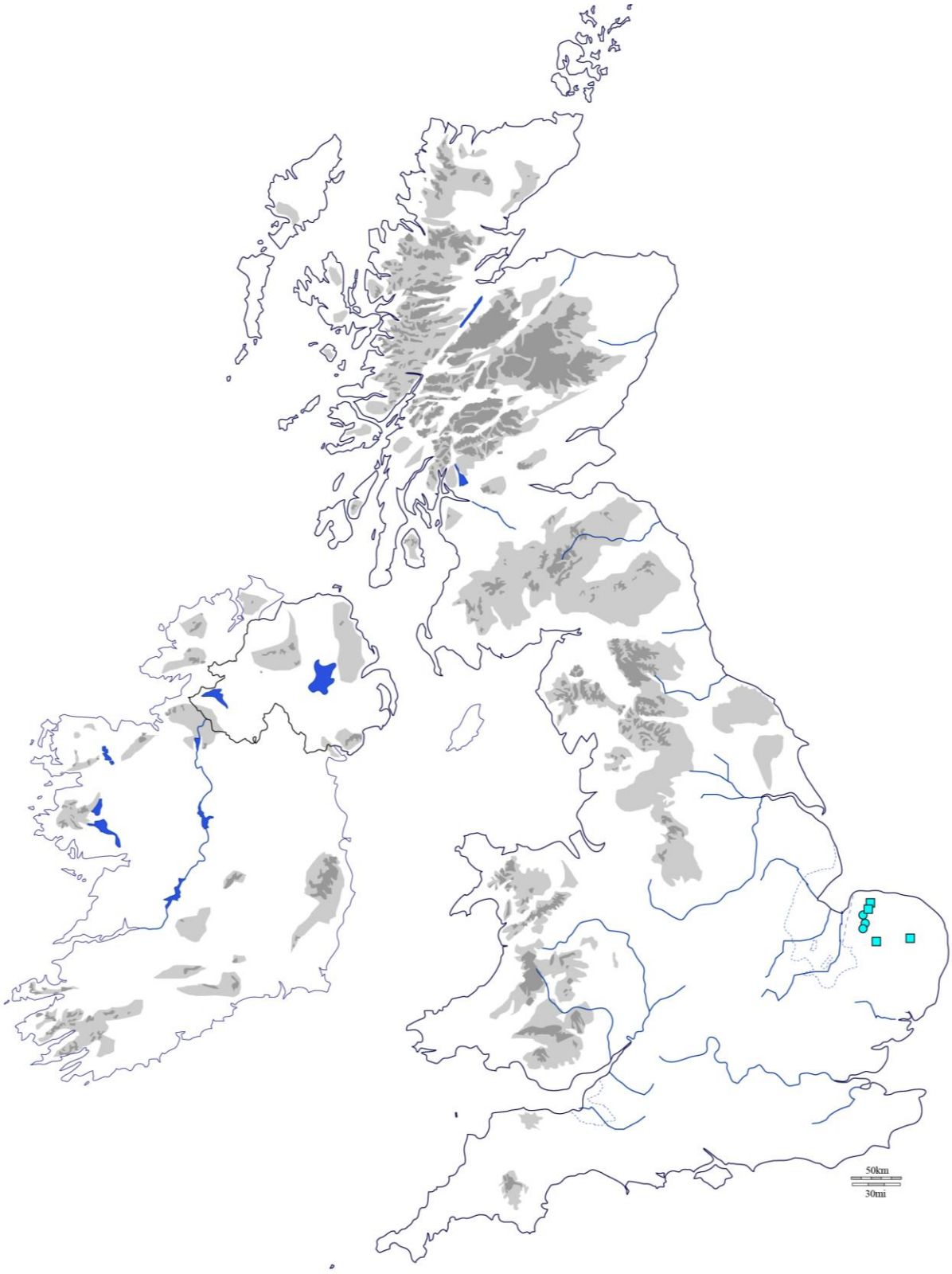


Figure 5.33: Distribution map of East Rudham type axes (Hoards; Single finds)

5.3.3. East Rudham type

Figure 5.34: East Rudham type axe from the Watton hoard (Norfolk, nos.895)

This easily recognisable axe type has been named after the largest hoard containing over forty of these axes and fragments thereof from East Rudham, Norfolk (nos. 845-886, Plates 43+44). These axes and their contexts are very similar to Portland type axes (see below) and their metallurgy will be considered together in the section on Portland type axes.

Like their South English counterpart, East Rudham axes are smaller than other axe types and extremely light, thinly cast and made of a copper-alloy with a very high tin content. They contain so much tin that the axes are dark silver in colour and are being left with a very brittle constitution (fig. 5.34).

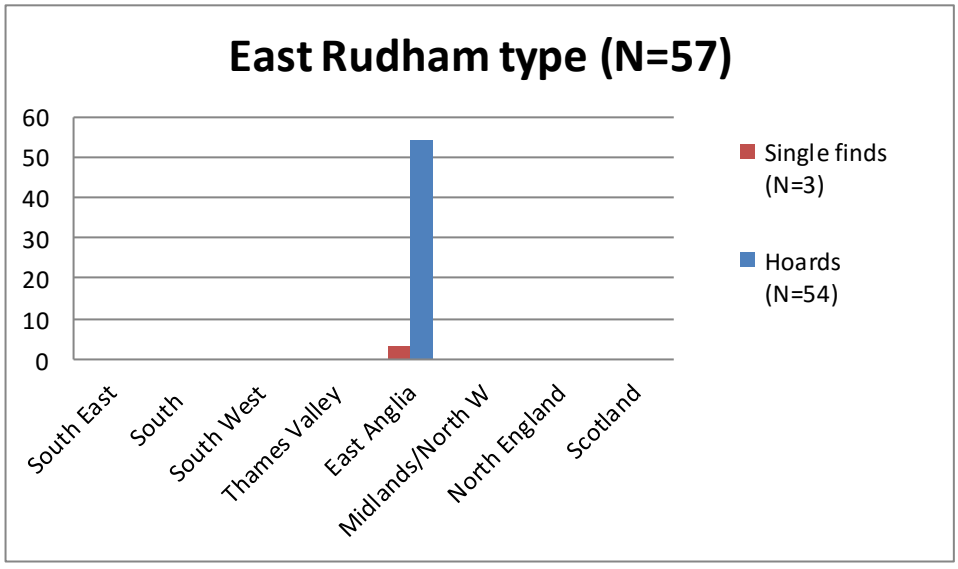


Figure 5.35: Distribution of East Rudham type axes

East Rudham axe fragments are very angular, with sharp, pointy corners and sharp edges. Their looks and fragility resemble glass shards or splinters much

more than axe fragments. Furthermore, most if not all East Rudham axes were never used as tools. Usually, the casting seams are still intact and the axes are blunt and show no signs of sharpening. They are predominantly recovered from hoards and all East Rudham type axes were found in Norfolk (fig. 5.33).
The East Rudham hoard itself (with 42 complete axes and over 30 fragments) is the largest hoard of these axes, with the well-known hoard from Watton (also Norfolk: nos. 889-895, fig. 5.34, Plate 44) with 7 axes following as second largest.

5.3.3.1. East Rudham type: Decoration

The decoration of East Rudham type axes always consists of bundles of thin ribs which are set close to the edges of the faces, running usually almost parallel to them. The bundles occasionally terminate in a small oval or round pellet and they may be differently spaced, but the basic pattern remains the same in all axes of this type (Plates 42-44). It is important to note, however, that East Rudham axes are not facetted, as had been thought in the past and which is why they had been given the somewhat misleading type name 'linear-facetted axes'. Instead of being facetted, their sides are slightly rounded; the rib-bundles are part of the faces' decoration and not limited to an extra facet between face and side.
Single and multiple additional facets, however, do occur on axes of the Ewart Park metalwork assemblage and are best exemplified by Meldreth type facetted axes which have an octagonal or even decagonal cross-section which East Rudham axes, on the whole, *do not* share.

5.3.3.2. East Rudham type: wear analysis

The result of the wear analysis of East Rudham axes shows that these axes were overwhelmingly deposited as cast (fig. 5.36). The majority of these axes did not show any sign of wear or use and some of them retained their clay core inside the socket.

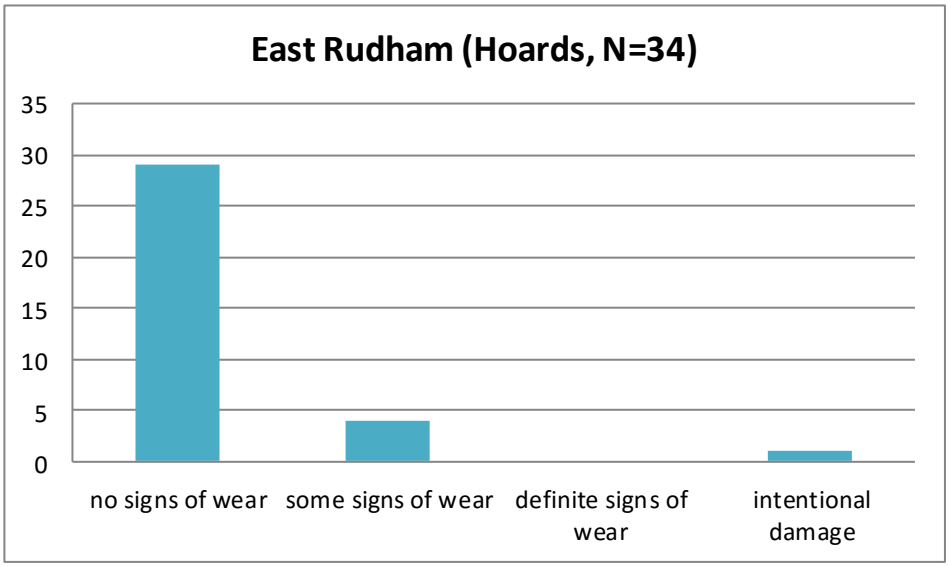


Figure 5.36: Degree of wear: East Rudham type (part of hoard)

Only three axes were single finds: they showed only few signs of wear and in one instance it was only the removal of casting seam (Castle Acre, Norfolk, no. 901, Plate 45).

5.3.4. Linear-decorated type

'Linear-Decorated' or 'Linear-Ornamented' (following Moore and Rowlands, terminology, 1972, 30) axes are most closely related to East Rudham axes. However, there are some major differences in the finds' contexts and some less apparent differences in axe treatment which should not be overlooked.

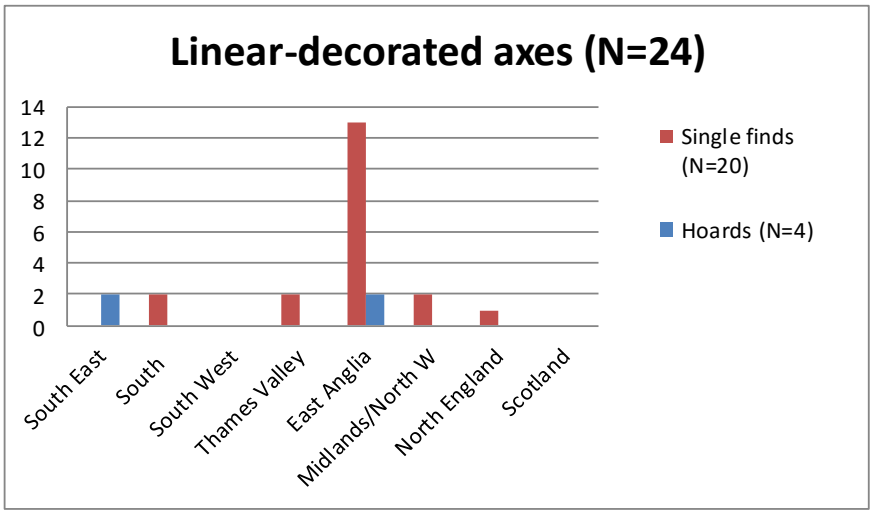


Figure 5.37: Distribution of Linear-decorated axes

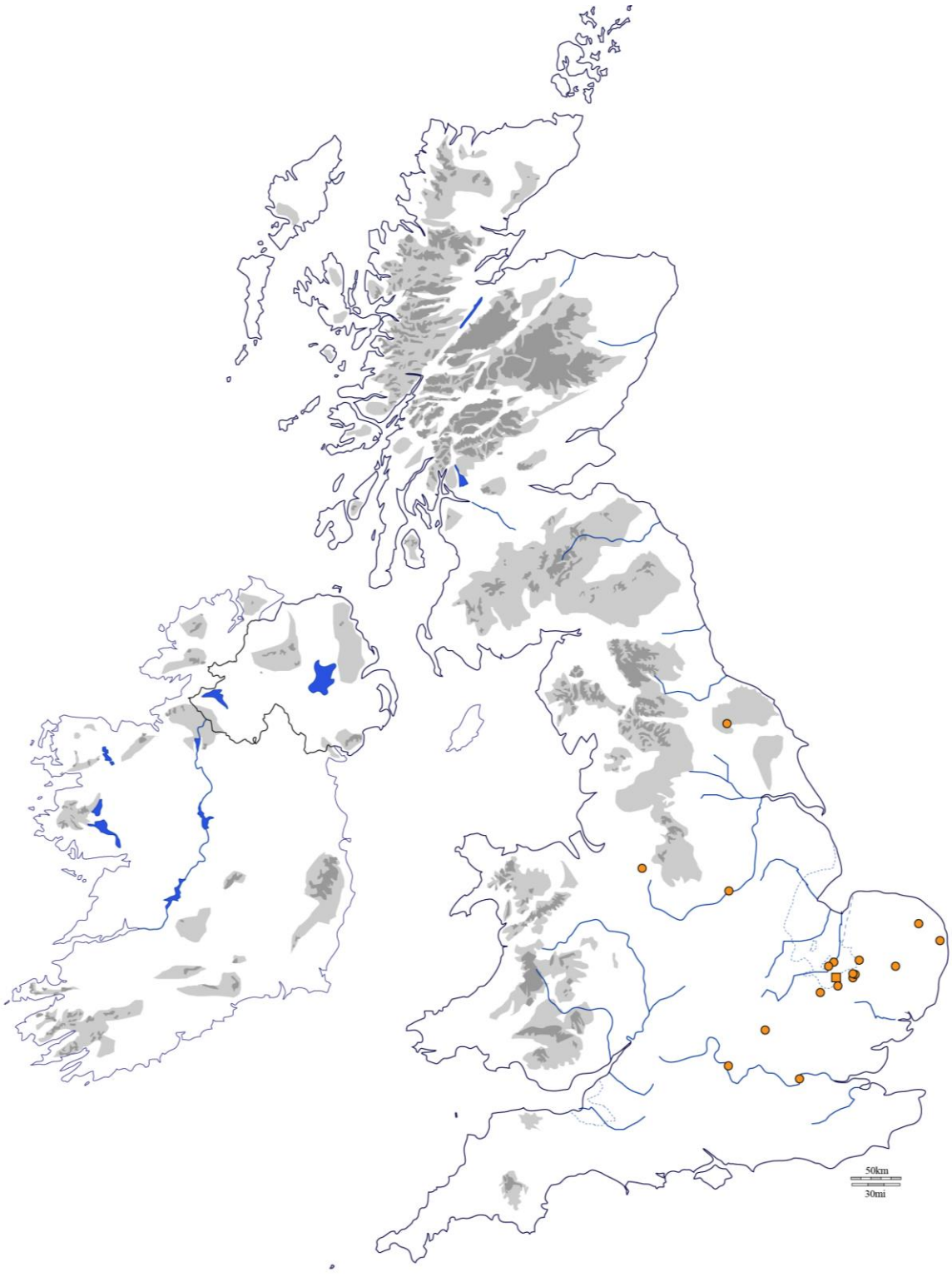


Figure 5.38: Distribution map of Linear-Decorated axes (Hoards; Single finds)

Figure 5.39: Linear-decorated axes (Wicken Fen Hoard, Cambridgeshire, nos. 81-82)

While East Rudham axes are found in hoards, Linear-Decorated axes are almost always found on their own, the only exception being the small hoard from Wicken Fen (Cambridgeshire: nos. 81-82) containing two axes. Like East Rudham type axes, however, they are predominantly an East Anglian type (fig. 5.37+5.38)

5.3.4.1. Linear-decorated axes: decoration

East Rudham and Linear-Decorated axes display a very similar decoration, but in Linear-Decorated axes the pattern is less clear and sometimes seems 'blurred' or 'washed-out' (fig. 5.39). Occasionally, Linear-Decorated axes bear additional ribs terminating in pellets or roundels between the rib bundles near the edges of the faces, e.g. the axe from Reach, Cambridgeshire (no. 98, Plates 13+14). Two more curious examples are the axes from the Fens, near Ely (nos. 87+88, Plates 8+9) which bear a single rib down the centre of the faces that bifurcates half-way down, both ends terminating in circlets. These two specimens were probably made in the same mould or from the same mould template.

5.3.4.2. Linear-decorated axes: wear analysis

Linear-Decorated axes differ from East Rudham axes because they have often been used (fig. 5.40). They were made of a copper alloy with a lower tin content resulting in reduced brittleness. Also, on the whole, Linear-Decorated axes were sharpened and prepared to be used, i.e. the casting seams were removed and the blades were hammered into a splayed shape and sharpened.

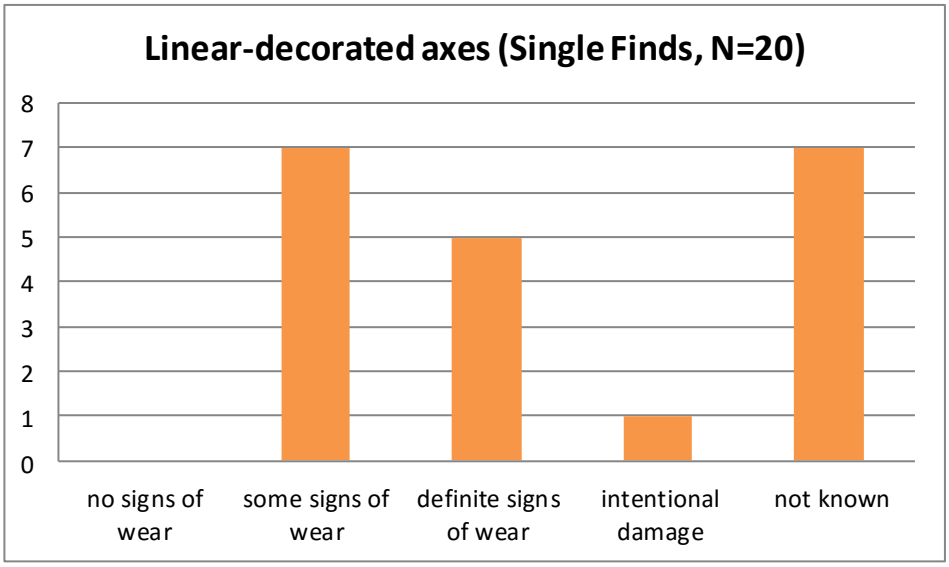


Figure 5.40: Degree of wear: Linear-decorated axes (single finds)

A piece of wood from the haft was found inside the axe from Hockwold (Suffolk, no. 903, Plate 46). The two axes that form the small hoard from Wicken Fen (Cambridgeshire, nos. 81-82, Plate 7) show definite signs of use while the two axes that formed part of the Sompting hoard (Sussex, nos. 1009-1010) are not reported to show any use. Unfortunately, this could not be confirmed as the Sompting hoard is unavailable for research.

5.3.4.3. Linear-decorated axes: metallurgy

No metallurgical analysis was carried out on linear-decorated axes.

5.3.5. Portland type

Portland type axes are a new type derived from the group of 'linear-facetted axes' (O'Connor 1980, 231). Some Portland axes are facetted, but these are exceptions. This group of axes is not generally linear-facetted at all. Portland type axes are normally c. 90mm long, weigh c. 100-125g and have a mouth ratio of >1, making their mouth sub-rectangular, as exemplified on the data derived from the Langton Matravers deposits (Dorset, nos. 226-598, fig.5.42).

Portland type axes are found in larger hoards (e.g. Salisbury/Netherhampton (Wiltshire: nos. 1061-1202, Plates 91-99), Eggardon Hill, Portland (Dorset: nos. 599-609, fig. 5.43, Plates 27-29) and Langton Matravers (Dorset, nos. 226-598; fig. 5.42) as well as in smaller hoards, for example from Weymouth (Dorset:

nos. 636-637, Plate 30). The great majority of finds of Portland type axes come from Dorset (fig. 5.41). The only group of Portland type axes found outside of Dorset is the group of 141 axes found as part of the multi-period assemblage from Salisbury/ Netherhampton (Wiltshire: nos. 1061-1202).

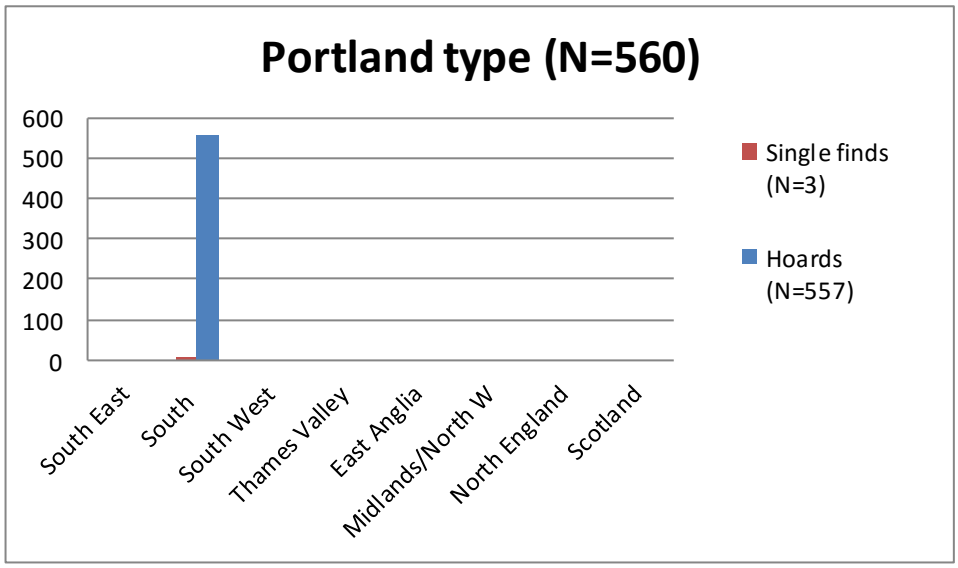


Figure 5.41: Distribution of Portland type axes (hoards and single finds)

Portland type socketed axes were rarely found on their own. However, we have very little information about the three axes that are classed here as 'single finds': one axe from Bradpole (Dorset, no. 638) and two from 'Dorset' (nos. 646+647, Plate 31) for which we have no further information.

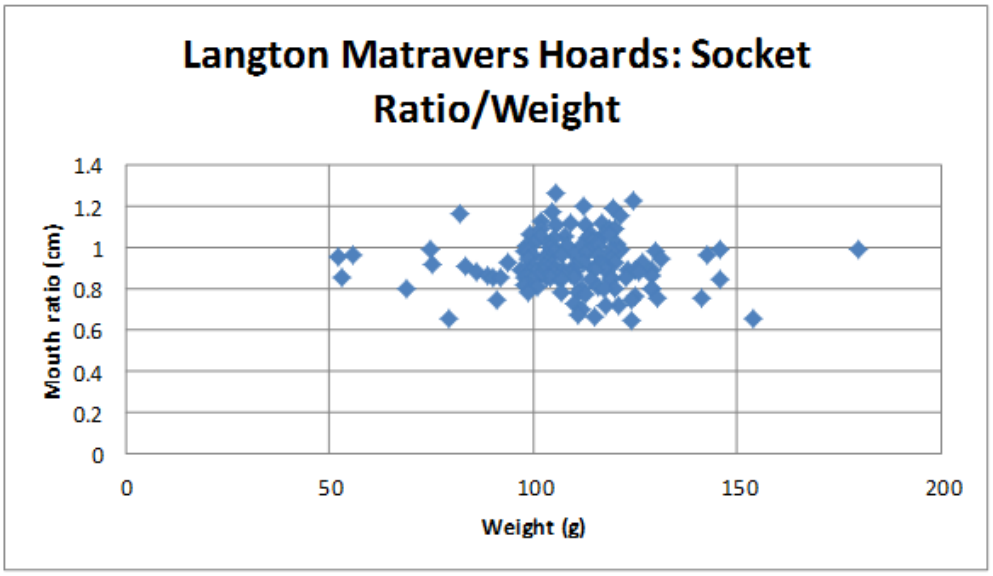


Figure 5.42: Comparative analysis of the weight and mouth ratio of the socketed axes from Langton Matravers (Dorset)

Figure 5.43: Portland type axes (part of Portland hoard, Dorset, nos. 600-602)

5.3.5.1. Portland type: decoration

Portland type axes are decorated with ribs terminating in small pellets. The ribs are clearly defined and normally evenly spaced. They do not occur in bundles enhancing the edges of the faces like they do on East Rudham type axes. Every rib terminates in a small pellet (fig. 5.43).

5.3.5.2. Portland type: wear analysis

None of the axes of Portland type show any post-casting work, such as hammering, annealing or even the removal of the casting seams (fig. 5.44). Axe no. 1094 (Salisbury, Wiltshire) shows recent re-sharpening marks. However, it was very probably found in as-cast condition.

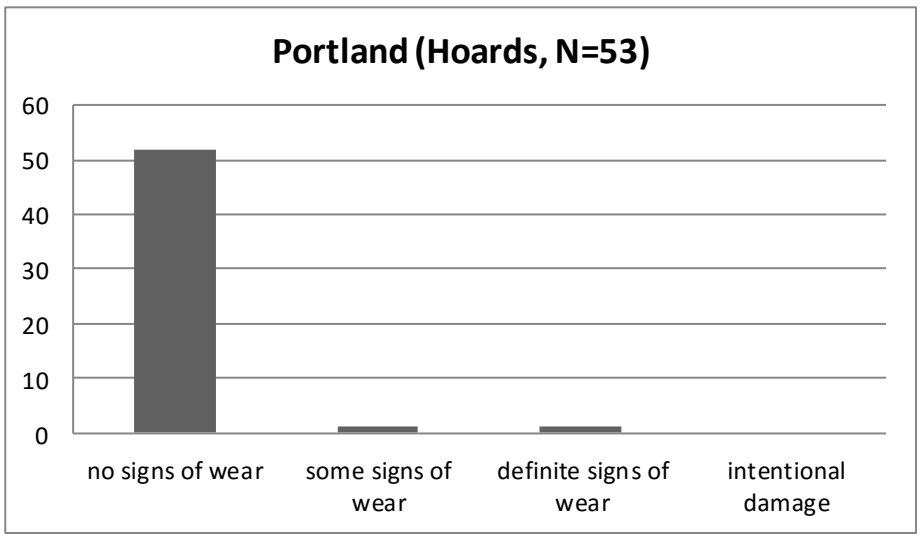


Figure 5.44: Degree of wear: Portland type (part of hoard)

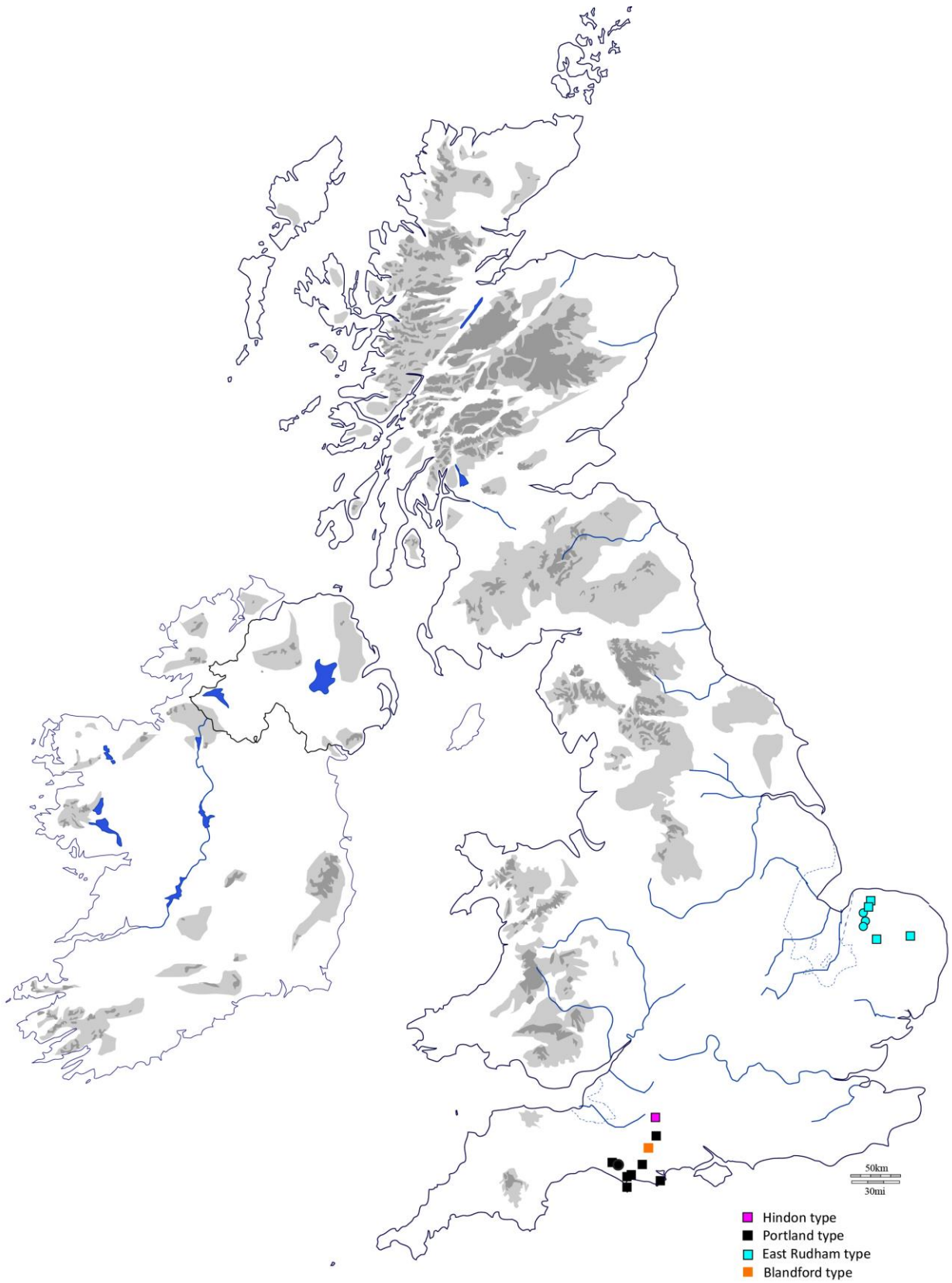


Figure 5.45: Distribution of Portland, Blandford, Hindon and East Rudham and type axes

5.3.6. Blandford type

Figure 5.46: Blandford Hoard (Dorset, no. 211)

Blandford type axes are a very small group of socketed axes: only eleven specimens are known, all from hoards. The group is named after the sole example from the Blandford hoard (Dorset: no. 211, fig. 5.44) which was found in association with two small socketed gouges. There are no single finds of Blandford type axes. They are sometimes found in association with Portland type axes, for example in the hoard from Thorney Down (Dorset, nos. 610-617) and Salisbury (Wiltshire: 1061-1202). One blade fragment of Blandford type has been found in association with a larger rib-and-pellet decorated axe and other scrap metal in the hoard from King's Weston Down (Bristol: no. 56).

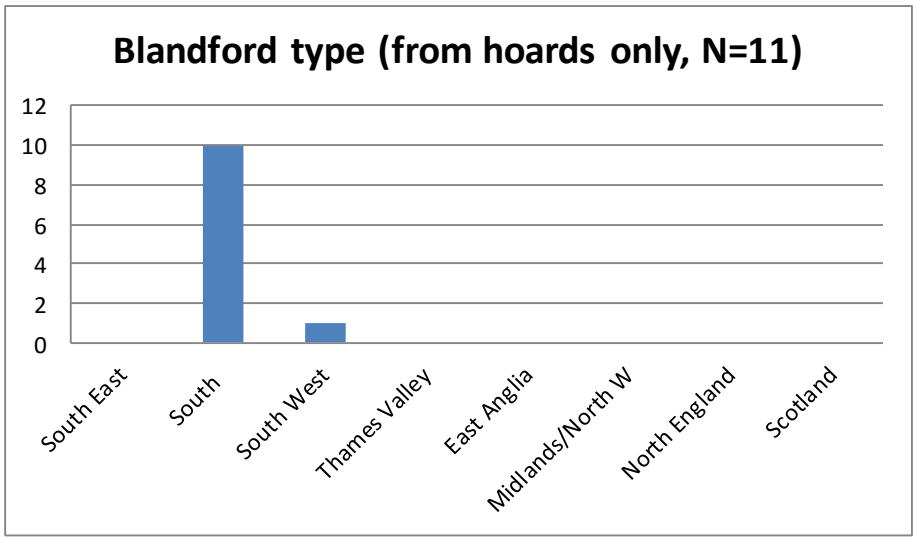


Figure 5.47: Distribution of Blandford types axes (no single finds)

5.3.6.1. Blandford type: decoration

Blandford type axes differ from Portland type axes in size and decoration. They are slightly bigger, more triangular-shaped and they are decorated with one or two shallow grooves along the edges of the faces. This decoration is similar to that on East Rudham type axes, but while the ribs are normally very defined on East Rudham type axes, they are not on Blandford type axes. Also, their body is much more triangular, while East Rudham type axes have an elongated body. Blandford type axes are slightly larger than both East Rudham and Portland type axes. However, Blandford type axes share their distribution area and associations with axes of Portland type (fig. 5.45).

5.3.6.2. Blandford type: wear analysis

Like Portland and East Rudham type axes, axes of Blandford type were found in as cast condition, with their casting seams still intact (fig. 5.48). The only axe that showed evidence for use and resharpening is the blade fragment from King's West Down (Bristol: no. 56, Plates 1-2).

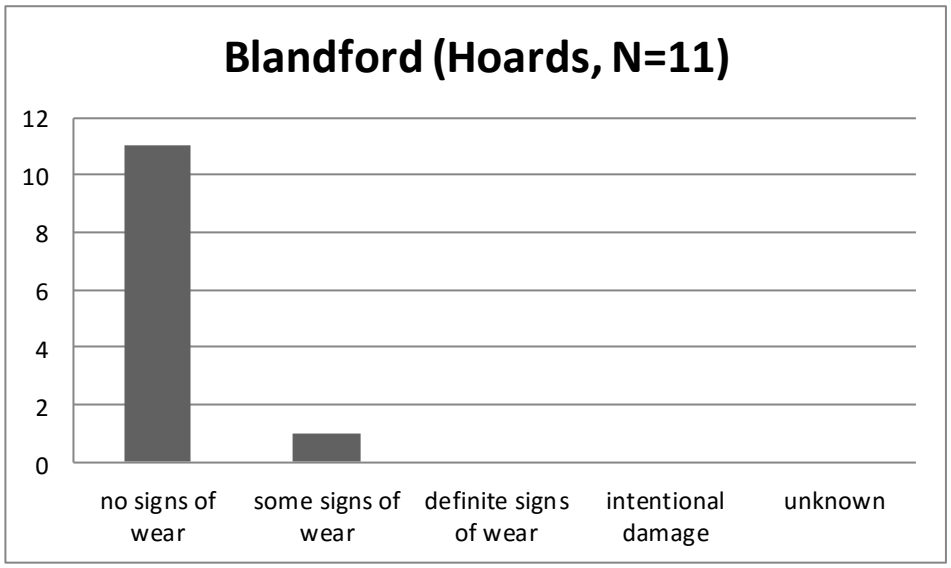


Figure 5.48: Degree of wear: Blandford type (part of hoard)

5.3.6.3. Blandford type: metallurgy

None of the eleven axes were analysed metallurgically but their shiny silvery surface colour and brittleness suggests that they had a similar metallurgical composition as axes of Portland type (see next section).

5.3.7. Technology and metal composition (Portland, Blandford and East Rudham types)

Like East Rudham axes, socketed axes of each Portland and Blandford type form two extremely homogenous groups amongst the axe types of the Early Iron Age, even though the latter two groups share the same general distribution in southern England. Generally, all three axe types are lighter and smaller than linear-decorated axes, Sompting type and Armorican type axes.

Portland type axes were made of a copper-alloy with a very high tin content; they were very thinly cast and brittle. There are no analyses of East Rudham and Blandford type axes but their very similar shape, colour and brittleness strongly suggests a similar metallurgical composition.

In 1983, Sue Pearce argued that socketed axes of Portland type (which she then called ‘Blandford’) represented the first convincing tin ingots of the Late Bronze Age, and should be interpreted as raw metal, rather than usable tools (Pearce 1983, 120-121; 253). She suggested that while Armorican axes were a ‘lead ingot’, Portland axes could be seen as ‘tin ingots’. The high tin content of Portland type axes has been confirmed by metallographic analysis which suggests a tin content of between 11.45-22.96% and a lead content of between 7.3-11.6% (Northover 1987, 36-37). Northover also argues that inverse segregation gives many a hard silvery surface, enriched in tin (Northover 1988, 79). Portland axes stand out not only because of their high tin content, but also because they are small compared to other axes (ca. 9cm), clearly wedge-shaped, thin-walled and usually have a less than 5mm thick cutting edge (which leaves them useless as tools).

5.3.8. Hindon type

The Hindon type is named after thirty-three axes which formed the biggest part of the recently discovered assemblage from Hindon (Wiltshire, nos. 1354-1387; Treasure Number: 2012T46). The hoard was declared Treasure in 2013 and subsequently donated to Salisbury Museum in 2014. Cleaning and conservation of the axes are in progress and their metallurgical analysis is pending.

The 33 Hindon type axes were found in association with one axe of Sompting type, Cardiff II variant, and several wrought iron artefacts (spearheads and sickles) which date the hoard to the Earliest Iron Age.

Figure 5.49: Hindon type axe (from the eponymous hoard, no. 1361, before and after conservation)

Hindon type axes are between 9-10cms long and have a blade width of 4-5cms. They have square or slightly sub-rectangular sockets, are undecorated and show no signs of wear. Their weight is uncertain because at the time of analysis, the axes were still in the British Museum undergoing Treasure proceedings. None of the axes showed any signs of wear (fig. 5.50).

5.3.8.1. Hindon type: Decoration

Unlike socketed axes of related types (Portland, Blandford and East Rudham), Hindon type axes are undecorated (fig. 5.49). They do no display any ribs, pellets, enhanced side facets and any other decoration except their unusual shiny silver surface colour.

The only Hindon type axe which is decorated is no. 1355 (Plate 137). This axe has the same surface finish as the other axes, but in addition, it displays a decoration of two parallel ribs in the centre of each face, diverging slightly at the end with each terminating in a small round circlet. This decoration is highly unusual and finds no parallel in the South of England. However, there are two single finds of linear-decorated type from Cambridgeshire which have a very similar decoration which is, however, equally unusual in East Anglia (nos. 87+88). They were quite possibly made in the same mould or from the same mould template. This similar style in decoration on one Hindon type axes and

two linear-decorated axes from East Anglia underlines the connection between the South and East England suggested by the appearance of groups of small, thinly-cast high-tin/high-lead axes with a tin-enriched surface that gives them a silver shine. These types of axes and this unusual decoration are specific to the South and East England (fig. 5.45).

Length	Blade (width)	Socket (width, inner)	Socket (width, outer)	Socket (length, inner)	Socket (length,outer)	Weight	Decoration	Wear	Catalogue Number
9.548	5.26	2.257	2.674	2.261	2.901	109	Undecorated	no signs of wear	43
10.376	5.728	1.694	2.624	2.11	2.612	119	Undecorated	no signs of wear	52
9.244	4.482	2.207	2.915	2.271	2.746	120	Undecorated	no signs of wear	51
9.189	4.393	1.971	2.2664	2.252	2.762	110	Undecorated	no signs of wear	56
9.418	4.23	2.023	2.705	2.031	2.601	125	Undecorated	no signs of wear	1
9.599	4.577	2.09	2.673	2.068	2.756	139	Undecorated	no signs of wear	54
9.296	4.396	2.06	2.6443	2.233	2.671	125	Undecorated	no signs of wear	59
9.571	4.334	1.989	2.808	1.855	2.695	108	Undecorated	no signs of wear	42
9.399	4.263	2.201	2.706	2.064	2.619	123	Undecorated	no signs of wear	62
9.587	4.11	2.121	2.774	2.433	2.961	140	Undecorated	no signs of wear	55
9.18	4.278	1.927	2.658	2.074	2.63	117	Undecorated	no signs of wear	44
9.162	4.255	2.114	2.659	1.924	2.739	135	Undecorated	no signs of wear	48
9.349	4.387	2.173	2.642	2.356	2.723	122	Undecorated	no signs of wear	61
9.294	4.272	1.959	2.557	2.164	2.551	114	Undecorated	no signs of wear	77
9.596	4.804	2.109	2.682	2.205	2.795	144	Undecorated	no signs of wear	73
9.508	4.642	2.172	2.693	2.39	2.847	158	Undecorated	no signs of wear	71
9.33	4.655	2.12	2.812	2.37	2.896	153	Undecorated	no signs of wear	67
9.382	4.388	2.172	2.64	2.152	2.665	130	Undecorated	no signs of wear	79
9.425	4.261	2.061	2.68	2.124	2.64	121	Undecorated	no signs of wear	66
9.545	4.671	2.235	2.731	2.315	2.822	148	Undecorated	no signs of wear	70
9.312	4.303	2.052	2.679	1.987	2.578	124	Undecorated	no signs of wear	57
9.461	4.731			2.2213	2.815	128	Undecorated	no signs of wear	53
9.414	4.399	2.152	2.742	2.244	2.619	113	Undecorated	no signs of wear	60
9.5	4.806	2.216	2.808	2.05	2.869	142	Undecorated	no signs of wear	78
9.485	4.49	2.123	2.687	2.319	2.712	114	Undecorated	no signs of wear	68
9.414	4.602	2.072	2.576	2.021	2.759	143	Undecorated	no signs of wear	65
9.414	4.707	2.138	2.907	2.287	2.864	133	Undecorated	no signs of wear	58
9.274	4.374	2.178	2.623	2.171	2.656	118	Undecorated	no signs of wear	69
9.334	4.273	2.041	2.673	1.727	2.585	121	Undecorated	no signs of wear	50
9.49	4.186	2.036	2.644	2.153	2.594	118	Undecorated	no signs of wear	64

Figure 5.50: Details of the Hindon type axes from the Hindon hoard (Wiltshire)

5.3.8.2. Hindon type: Wear

The general wear of Hindon type axes could not be analysed in details due to their general condition while they were in the British Museum. However, superficial analysis of the blades strongly suggests that they, too, had not been sharpened prior to deposition (fig. 5.51). They did not show any evidence for use or re-sharpening, very much like axes of related types Portland, Blandford and East Rudham.

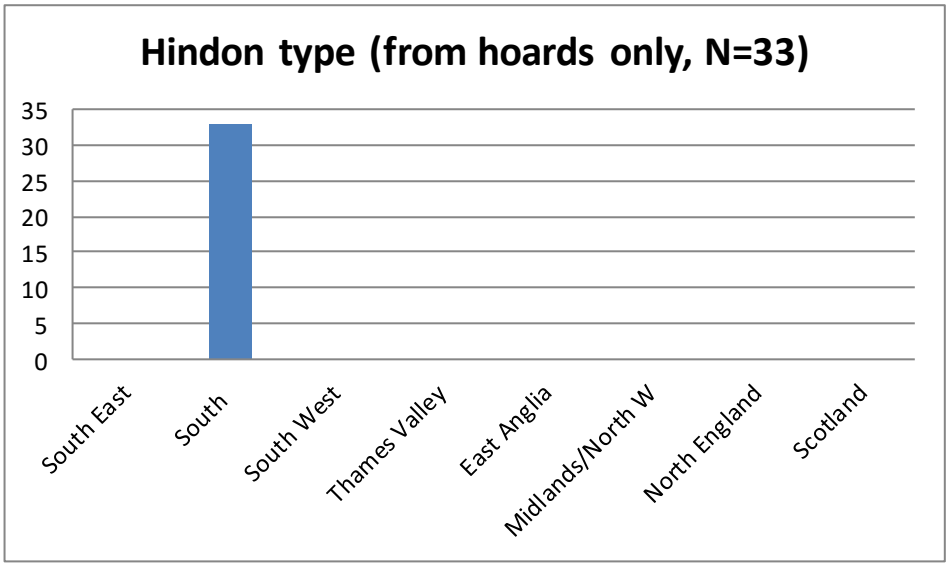


Figure 5.51: Distribution of Hindon type axes

5.3.8.3. Hindon type: Technology and metal composition

The metallurgical analysis of Hindon type axes is pending, but due to their similar size, wear, wall thickness and surface finish to Portland, Blandford and Rudham type axes it seems likely that their metallurgy is similar, too. This would mean that these axes were also made from a high-tin (approximately 11-23%)/high-lead (7-12%) copper alloy. In addition, their highly polished, silvery surface suggests that it was enriched in tin.

5.3.9. Armorican type

Armorican axes are well-known. It is a very homogenous group, which probably originated in North-Western France, thus being called Armorican axes or Breton axes. In 1965, Briard described them and attempted to define sub-types (Briard 1965, 247-50). British hoards are found in Cornwall, Hampshire and South

Wales, for example at Tintern (Glamorgan; nos. 1333-1334, Plates 132-133) Nether Wallop (Hampshire: nos. 690-702, Plates 38-39) and near Southampton (Hampshire: nos. 705-772). Single finds are often unprovenanced or may have been part of larger, now dispersed hoards (figs. 5.55+5.56; O'Connor 1980, 235). There is a great difference in numbers of specimens from Armorica and elsewhere. There are over 220 hoards with over 22,500 axes from Brittany (O'Connor 1980, 235), while assemblages from Britain and elsewhere in France often include fewer than 100 axes.

Figure 5.52: Armorican type axe (no.1406: Llanmaes, Glamorgan)

Similar to East Rudham and Portland axes, Armorican axes appear to be very uniform, even though they occur in sizes between 5-12cm (O'Connor 1980, 235). Armorican axes have very straight, almost parallel sides and an extremely narrow blade (fig. 5.52). They are usually blunt and often the casting seams at the sides and the mouth are still intact. They usually have a high lead content and are on average heavier than other axe types.

5.3.9.1. Armorican axes: Wear analysis

The homogeneity of this type is also reflected in their wear. Most Armorican axes were found in hoards where they were associated with other Armorican axes, and single finds are rare. However, there is no difference in wear patterns between axes from hoards and single finds (figs. 5.53+5.54).

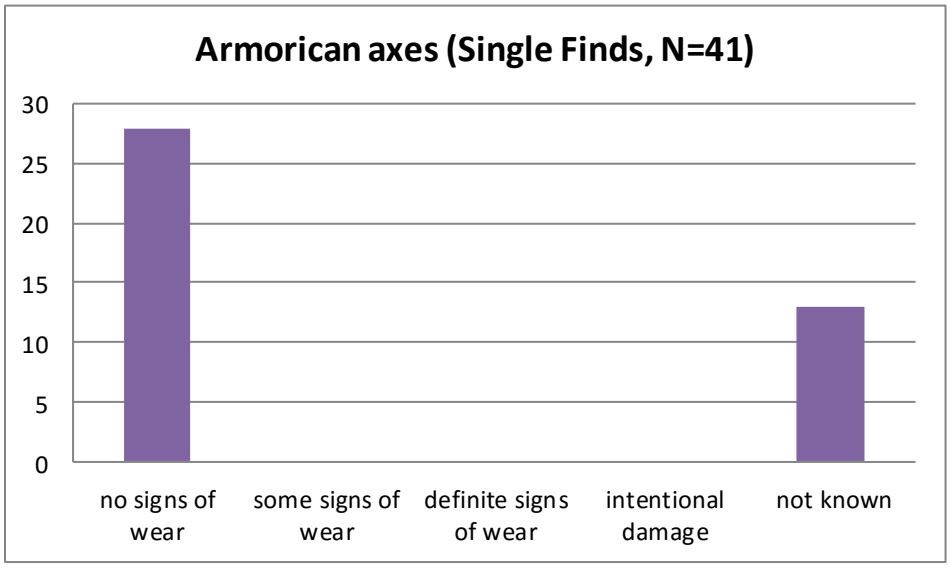


Figure 5.53: Degree of wear: Armorican axes (single finds)

Almost all of them were deposited in as cast condition and only two Armorican axes from two different hoards show some intentional damage: they survive broken up (no. 686: Danebury, Hampshire; no. 692: Nether Wallop, Hampshire; Plates 35-36+38-39).

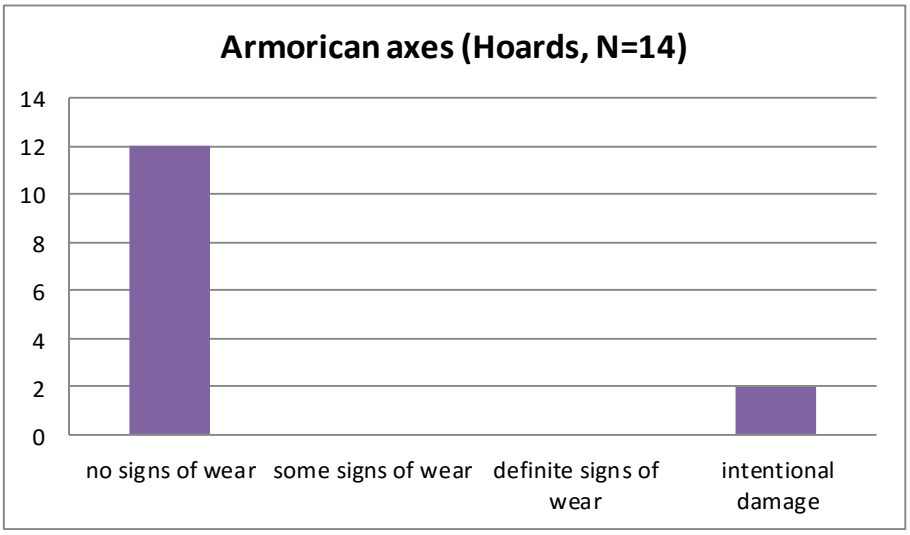


Figure 5.54: Degree of wear: Armorican axes (part of hoard)

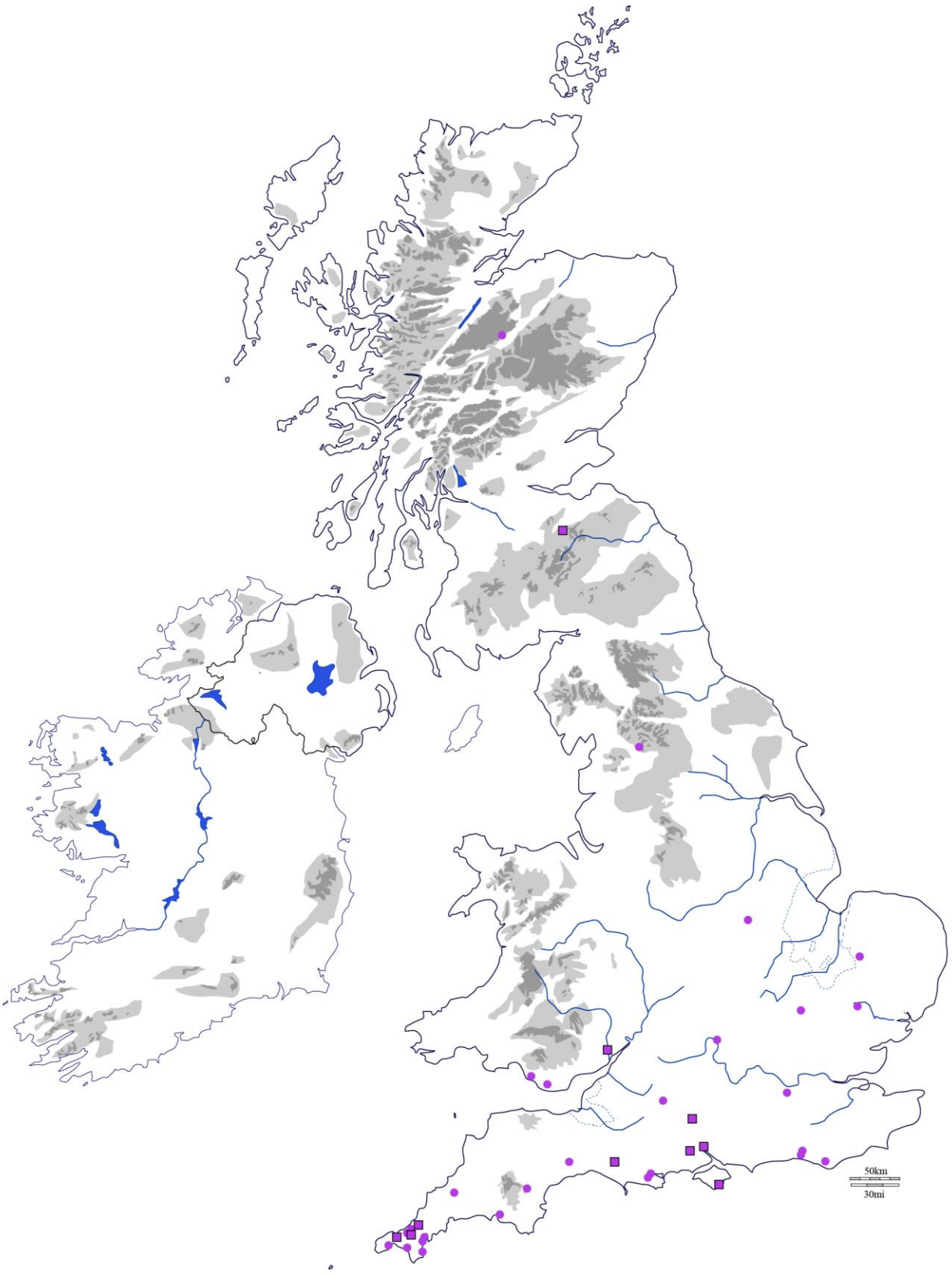


Figure 5.55: Distribution of Armorican type axes (Hoards ■, single finds ●)

Armorican axes do not show any evidence for use, that is their casting seams were not removed and their blades were not sharpened. Many still had their clay cores inside.

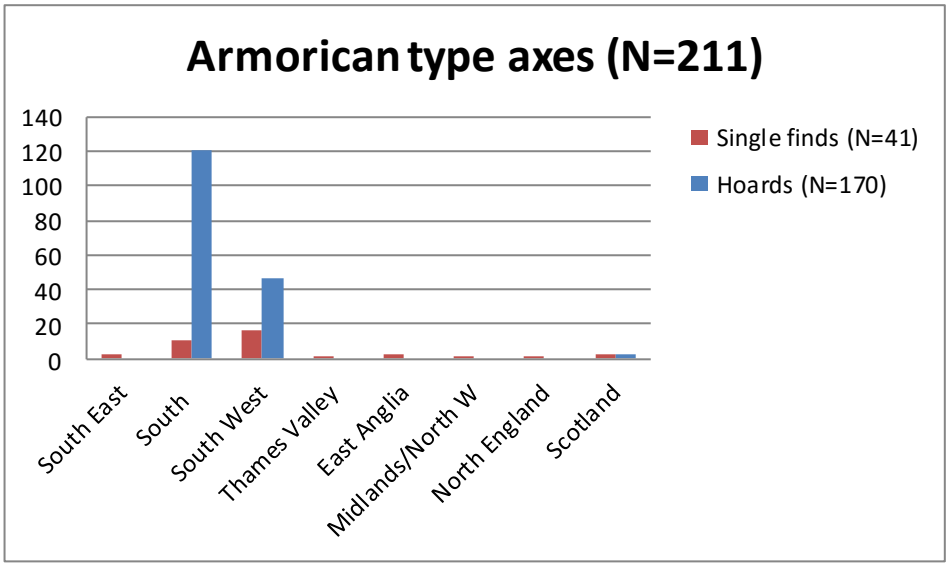


Figure 5.56: Distribution of Armorican type axes

5.3.9.2. Armorican axes: Technology and metal composition

Armorican axes' principal features are their parallel sides, narrow cutting edges, their sub-rectangular, biconical and angular mouth mouldings. They are heavy due to the use of low strength low tin/high lead bronzes (Northover 1988, 76). Like Portland and East Rudham axes, they are usually found in as-cast condition, but retaining part of the clay core, and if found in hoards, they are generally found with other Armorican axes; only rarely have they been discovered with other types of metalwork making the hoards from Longy (Alderney), Danebury (Hampshire) and possibly King's Weston Down (Bristol) notable exceptions (Kendrick 1928, 62-64; Cunliffe and O'Connor 1979, 235-244; Northover 2004). Furthermore, when found in axe hoards, they are sometimes found in a particular mode of deposition where they are formed into cylindrical stacks, the axes arranged in a tightly packed circular pattern with their cutting edges pointing towards the centre (Northover 1988, 76). They are the only axe type for which we have a radio carbon date: 570+/-110BC (Coursaget and Le Run 1966, 136). This suggests a long life span for this particular kind of axe, considering that axes of this type have also been

discovered in Ewart Park/Carp's Tongue hoards of the eighth century at Longy (Alderney), St Lawrence (Jersey) and the seventh/sixth century settlement of Llanmaes in the Vale of Glamorgan, Wales (Kendrick 1928, 62-64; Lodwick and Gwilt 2009).

It has been suggested that Armorican axes triggered the development of Sompting axes in Britain (Burgess 1971). While this seems unreasonable because of general dissimilarities in size and shape of the two axe types, they may have been related to the development of Portland, East Rudham and, to some extent, Figheldean Down variant axes. While axes of Figheldean Down variant have a similar metal composition to Portland and East Rudham axes, they are related to Armorican axes in size, weight and shape.

5.3.10. Iron socketed axes

Figure 5.57: Iron socketed axe from Traprain Law, East Lothian (no. 1404)

The number of Early Iron Age iron socketed axes is comparatively small: so far, we only know of 20 specimens: eleven from England (nos. 76, 665, 667, 674, 678-680, 683, 685, 956 and 1402), five from Scotland (nos. 1263, 1267, 1281, 1403 and 1404) and four from Wales (nos. 1328-1330 and 1332). Three additional specimens (not counted here) are from the British Isles, but unprovenanced (nos. 1351-1353). A very recent find, from Fiskerton, Lincolnshire has not been included because it was discovered after completion of this catalogue (Portable Antiquities Scheme database

www.finds.org.uk Find ID: FAKL-38D115). Of these 24 socketed axes, 22 are looped and 2 unlooped.

Iron socketed axes were first published and discussed by Rainbow (1928, 170-175) and later reviewed and updated by Manning and Saunders (1972, 276-292).

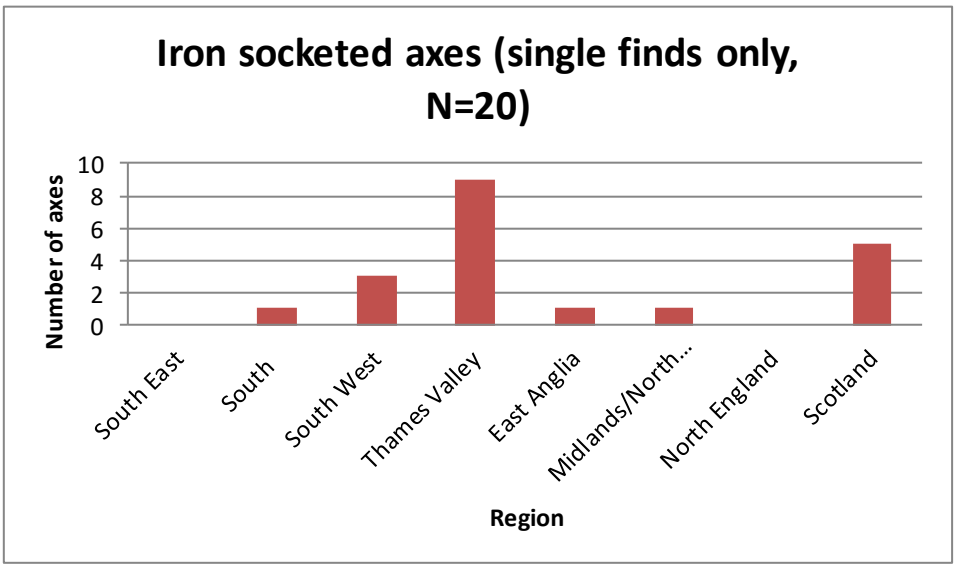


Figure 5.58: Distribution of iron socketed axes

The dating of these objects is problematic because iron axes were current throughout the British Iron Age and many are unprovenanced (O'Connor 1980, 237). However, some are known to have come from transitional or Early Iron Age contexts. Examples were found at Cold Kitchen Hill (Wiltshire) and Traprain Law (Midlothian) which are well-known Late Bronze Age/Early Iron Age settlements. Moreover, O'Connor (1980, 237) suggests that iron axes from riverside settlements at the Thames, for example at Brentford, may provide a clue to where the first iron was worked and deposited (figs. 5.58+5.59).

The 24 looped and unlooped iron socketed axes are not very different from one another and may therefore be classified as one group. They are sufficiently similar in size and shape to Late Bronze Age socketed axes of the Ewart Park metalworking phase to suggest that they have been copied from those (fig. 5.57). However, iron could not be melted down and cast like bronze; instead, the iron axes were probably forged from several bands of wrought iron (e.g. no. 1403: Rahoy, Argyll, Plate149; Manning and Saunders 1972, 279).

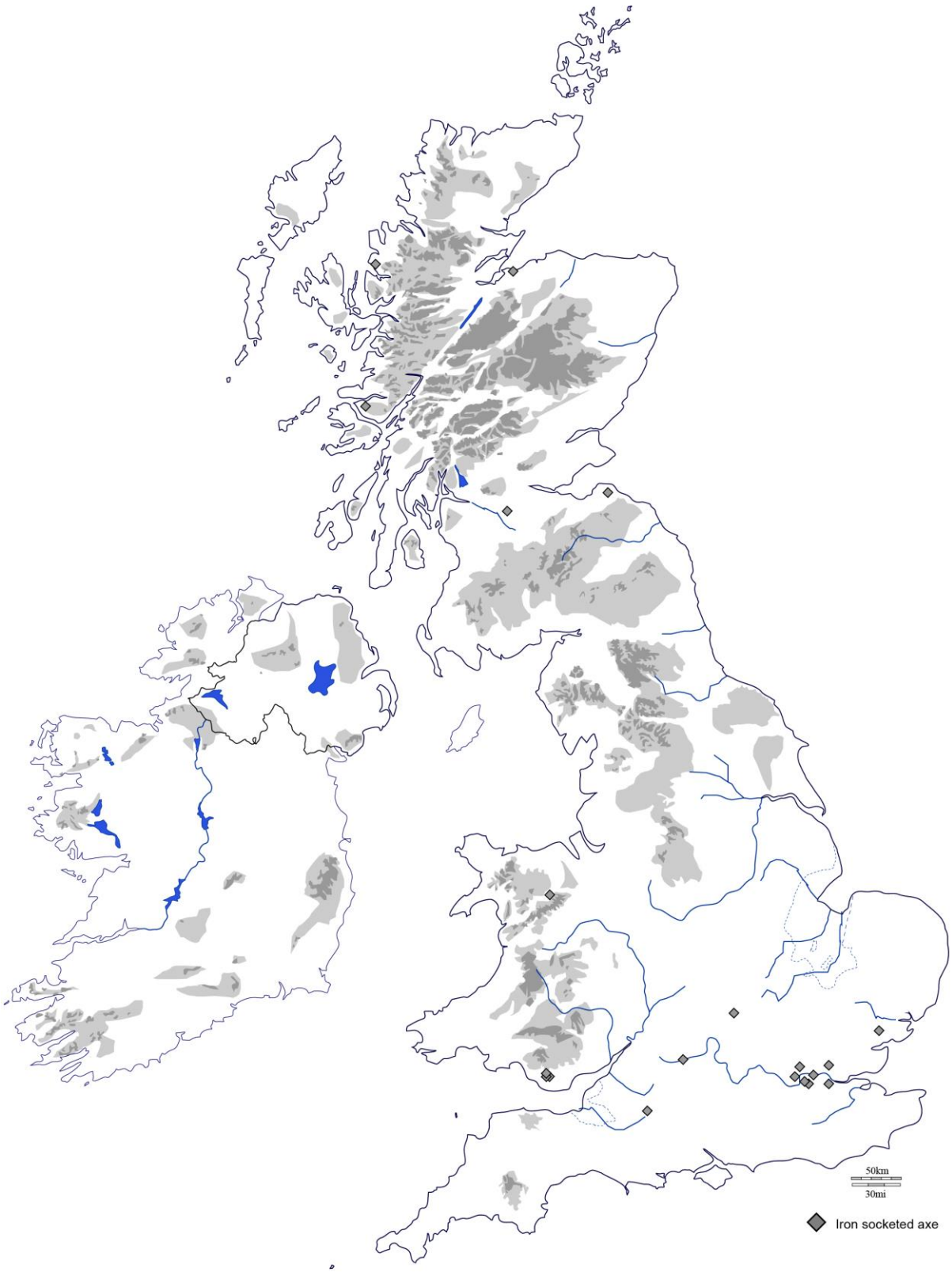


Figure 5.59: Distribution or iron socketed axes (all single finds)

The loop was most probably made of an extra strip of iron that was then welded onto the body of the axe. None of the axes are decorated, perhaps indicating that at this early stage of iron-working, and without the ability to cast in moulds, such decoration was impossible.

5.3.10.1. Iron socketed axes: Decoration

Iron socketed axes are not normally preserved very well and it is virtually impossible to analyse their surface for evidence of decoration, wear and re-sharpening. As far as we can tell they were undecorated and did not have additional mouldings or additional parts welded on, except where the loops were welded on separately.

5.3.10.2. Iron socketed axes: Wear analysis

Unfortunately, none of the socketed axes were in a condition that allowed for a closer analysis.

5.3.10.3. Iron socketed axes: Metallurgy

The 24 socketed iron axes were all made from sheets of wrought iron. This means that the iron piece was hammered into a strip plus wings on either side which would then be welded together to form a socket; the loop was welded on separately or made by tearing two small holes in the walls of the socket (Manning and Saunders 1972, 279).

Iron socketed axes could be made in different ways. For example, while on the specimens from Culbin Sands (Morayshire, no. 1267, Plate 112) and Traprain Law (Midlothian, no. 1404, Plate 149), socket and loop were forged at the same time, as they were in cast copper alloy socketed axes, the extremely large example from Rahoy (Morvern, Argyll, no. 1403, no. 149) and at least one of the axes from Penllyn Moor (Vale of Glamorgan, no. 1328, Plate 131) were composed of a long strip of iron that was folded over and a separately made iron loop that was welded on to the socket. This appears to be an overly complicated and painstaking process and the small number of iron socketed axes that survived suggests that the attempt of creating socketed iron axes was short-lived and quickly followed by the more wide-spread production of iron

shaft-hole axes which are much easier and more straight-forward to produce (Hingley 1997, 13-14).

Iron cannot be cast in moulds like bronze and needed to be hammered and welded into shape. However, while it is more complex to shape an iron object than to cast a bronze one, it also takes more effort to finish off the bronze object that means that it is easier to hammer iron than bronze.

The practice of producing socketed axes in iron was eventually discontinued altogether and while later axes had shaft holes, other tools like awls and sickles went back to easily welded ring-sockets or tangs (e.g. Hod Hill (Dorset), Potterne and All Cannings Cross (Wiltshire)).

5.4. Size matters: a study of the difference in size, weight, decoration and deposition of Early Iron Age socketed axe types

The corpus of Early Iron Age socketed axes differs greatly from Late Bronze Age socketed axes. Even though they are not one homogenous group, they can nevertheless be set apart from their Late Bronze Age counterparts by their size, weight and decoration.

If the axes showed sufficient features they were assigned to the one of the eleven main types defined in this thesis: Blandford, Portland, East Rudham, Linear-decorated, Sompting (with four different variants: Kingston, Tower Hill, Cardiff II and Figheldean Down), Armorican, Transitional and iron socketed axes. Uncertain types or ‘mules’ only occurred amongst the variants of the Sompting type and were attributed a cross-over label Kingston/Tower Hill or just Sompting if the variant could not be specified at all (figure 5.60).

5.5. Axe types: single and multiple depositions (hoards)

Socketed axes of Portland, Hindon, East Rudham and Blandford types and those of Armorican and Sompting type, Figheldean Down variant occurred in hoards rather than as single finds while iron socketed axes and axes of Sompting type (Kingston, Tower Hill and Cardiff II variants) and linear-decorated axes were predominantly discovered singly.

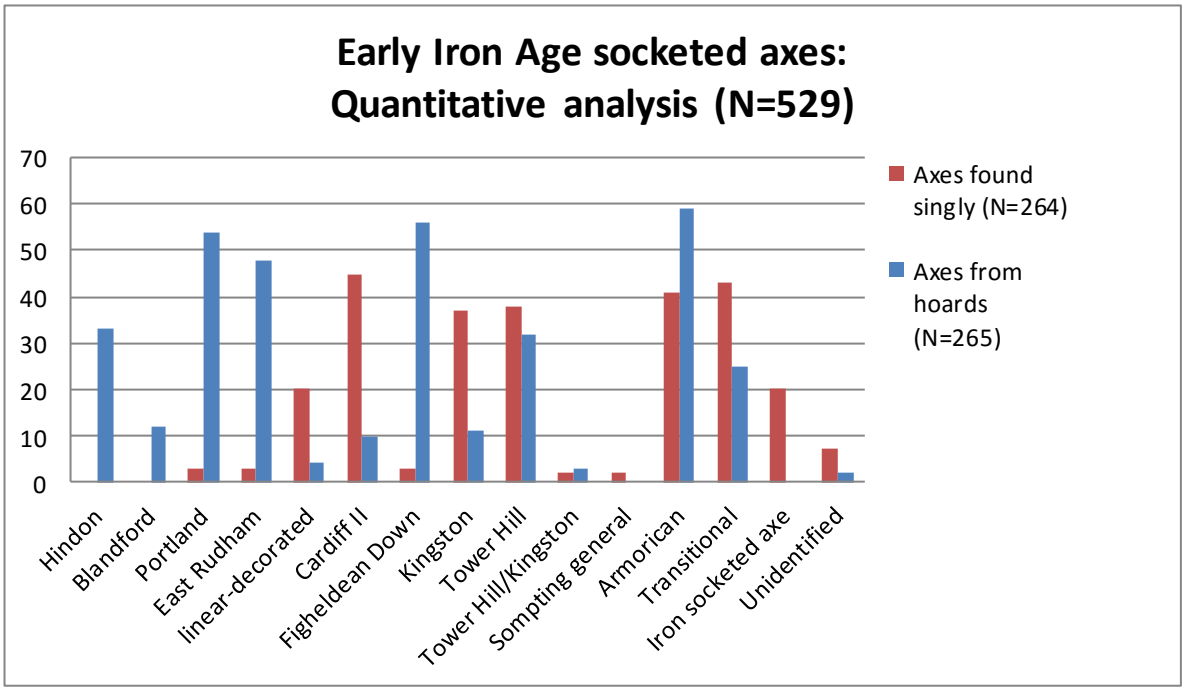


Figure 5.60: Quantitative analysis of single and associated finds of socketed axes (where type could be determined)

Transitional axes occurred in both hoards and as single finds but show a bias towards being found singly (figs. 5.60).

5.6. Iron socketed axes

Looking at decoration and carrying out use-wear analyses is important in determining what individual axes were used for, but not all Early Iron Age socketed axes leant themselves easily to this kind of examination. Iron socketed axes are not normally as well preserved as their bronze counterparts which is why in this case the study of their depositional contexts and associations becomes essential to our understanding of what they were used for and why they were deposited in certain places and not in others. Their preservation does not allow for a detailed use-wear analysis as no evidence for wear or re-sharpening marks survive, and most early iron socketed axes appear to have been undecorated.

The first iron objects were almost exact copies of their bronze predecessors, and it was only later that shapes more suitable to forging in iron were adopted (Salter and Ehrenreich 1984, 152). At the very beginning of the Iron Age, the superiority of iron over bronze was not the motivation for its widespread

adoption; instead, it is very likely that the much greater abundance of iron ores was the main reason behind the relatively quick adoption of the new metal (Champion et al. 1984). Champion and others suggested that during the later Bronze Age it became more and more difficult to secure an adequate supply of raw material for casting bronze objects and the change to an iron-using society may have been just another step in the readjustment of the organisation of the metal supply industry to meet demand (Champion *et al* 1984, 298; Hingley 1997, 9-10; Pare 2000, 2).

Unlike socketed sickles and spearheads, socketed iron axes have not been found in Early Iron Age hoards. All iron socketed axes were single finds, but in terms of contexts the percentage of iron socketed axes from contemporary settlements (21%, N=24) is greater than the percentage of copper-alloy socketed axes from settlement contexts although there were ten times the number of copper-alloy axes in circulation (6%; N=220).

Nine socketed iron axes were discovered in two very specific landscapes: six came from in or very close to the Thames (nos. 674, 678, 679, 683, 685 and 956) and three came from Penllyn Moor in the Vale of Glamorgan (nos. 1328-1330). Both areas are well-known for their Bronze Age metalwork deposition, and the majority of finds were single depositions rather than hoards (Bradley 1990, York 2002, Adam Gwilt *pers. comm.*). Iron artefacts that have been discovered in association with other Early Iron Age metalwork, such as wrought iron spearheads or sickles, were hardly ever found outside of settlement contexts, noteworthy examples being the iron tanged sickles from the settlement sites at All Cannings Cross (Wiltshire) and Hod Hill (Dorset) (Cunnington 1922, 13-18; Cunnington and Cunnington 1923; Pearce 1976, 30). The only unassociated finds of iron socketed spearheads are the two spearheads from Golden Lane (London) and Smeathes Ridge, Ogbourne St George (Wiltshire) (Carpenter 1929, 376-77; Gingell 1979, 250).

There was a marked difference in depositional treatment of iron and copper alloy socketed axes.

Copper alloy socketed axes were often deposited in hoards which may appear votive in character and are located in the vicinity of settlements or near water, like the hoards from Danebury (Hampshire, nos. 686-689, Plates 35-37) and

Eggardon Hill (Dorset, nos. 212-218, 219-225) but they are never found within the confinement of a settlement or hillfort. Iron socketed axes on the other hand appear to have a much stronger connection with settlements. O'Connor (1980, 237) suggests that even those iron axes from the Thames were eroded from riverside settlements. The association between iron and settlements suggests that they were more common household objects, probably rapidly replacing their bronze and Bronze Age antecedents. It has been suggested that rather than being a mystic, secretive act, iron working was a common activity, with numerous craftsmen capable of making iron tools at home (Morris 1996, 53-55). A regional study of iron working in central southern England has shown that, unlike Bronze Age bronze working, iron working took place at all types of sites, with smithing found wherever iron tools were present (Salter and Ehrenreich 1984, 152).

5.7. Copper alloy socketed axes

In contrast to the small number iron socketed axes (24) stands the large number of copper-alloy socketed axes (1389). Unlike iron axes, copper alloy socketed axes were found both on their own and in hoards. While the 24 iron socketed axes are generally of similar shape and size, Early Iron Age copper alloy socketed axes come in different shapes, sizes, weight and alloys. They also display a great variety in their decoration.

5.7.1 Size and Shape

It is their size, shape and weight that sets Early Iron Age socketed axes apart from their Late Bronze Age forerunners. Akin to their Late Bronze Age forerunners, Transitional axes generally have a weight of c. 200g and a rectangular mouth moulding (i.e. aligned with the blade), while Early Iron Age axes of Sompting type tend to be much heavier, with a square or sub-rectangular mouth moulding (i.e. not aligned with the blade) (figs. 5.62+5.63; Burgess 1971).

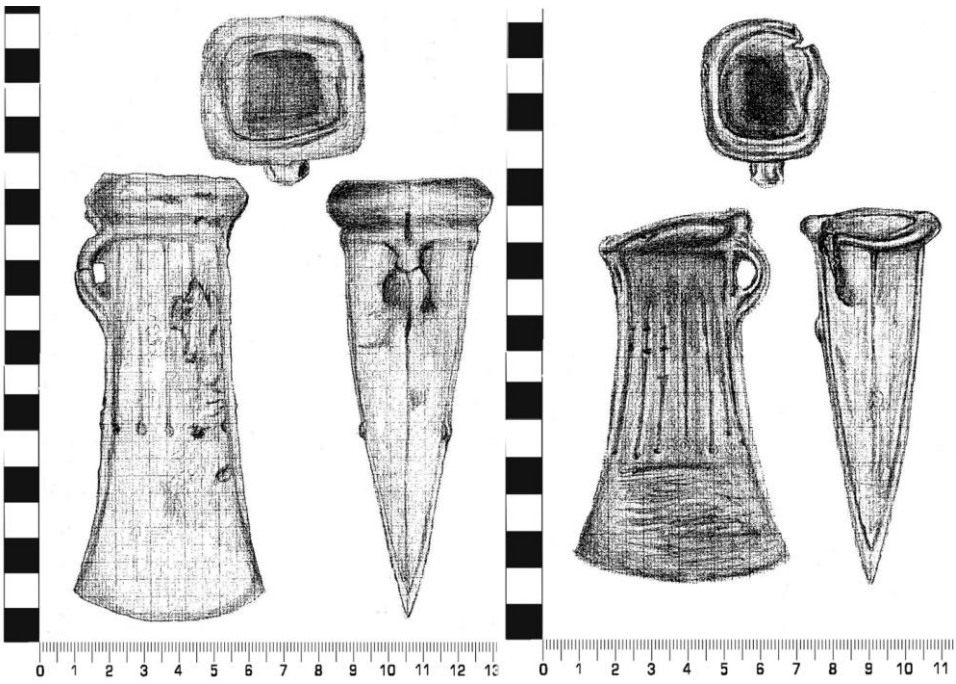


Figure 5.61: Comparison of a Sompting type axe on the left (Cardiff II variant from Boston, Lincolnshire, no. 840) and a Transitional axe on the right (no. 840: Shelford, Nottinghamshire)

Throughout the Late Bronze Age and Late Bronze Age-Early Iron Age transition, they become heavier and the back-to-front mouth moulding is adopted (compare, e.g. Transitional axe no. 930 with Sompting type axe no. 840, fig. 5.61 and Plates 41+49).

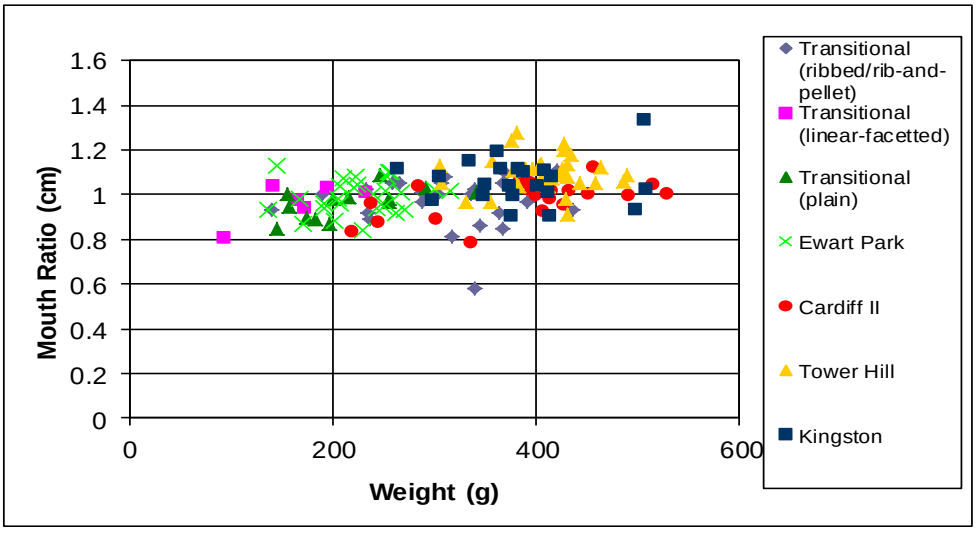


Figure 5.62: Comparative analysis of the weight and mouth ratio of selected Late Bronze Age axes of Ewart Park type, transitional axes and Early Iron Age axes of Sompting type, Cardiff II, Tower Hill and Kingston variants.

Generally, a mouth ratio of <1 indicates a rectangular mouth moulding, a mouth ratio of 1 indicates a square mouth and a mouth ratio of >1 indicates a back-to-front or sub-rectangular mouth moulding (figs. 5.62+5.63). The square or sub-rectangular mouth moulding was also adopted by the axes of the lighter and shorter socketed axes of East Rudham, Portland and Hindon types (fig. 5.63).

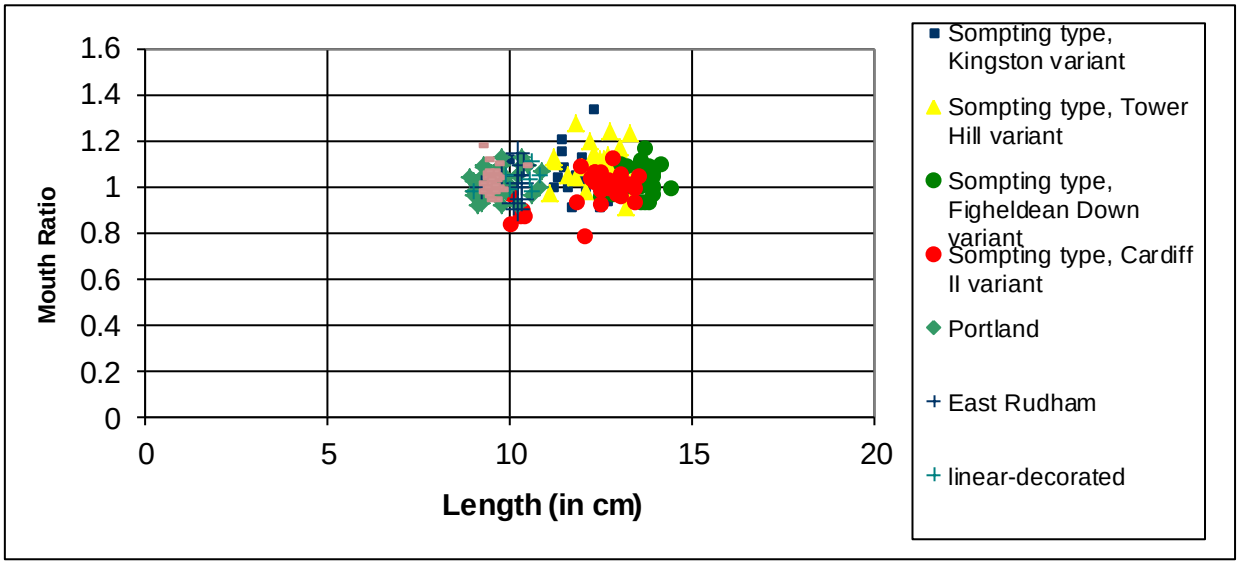


Figure 5.63: Comparative analysis of the mouth ratio and body length of Early Iron Age socketed axes

All types of Early Iron Age copper alloy socketed axes share the pre-dominantly sub-rectangular or square mouth shape (mouth ratio = >1). Sub-rectangular blades (aligned with the blade) are less prevalent. In terms of overall length, all variants of the Sompting type are always longer than c. 115mm while axes of Portland, East Rudham and Hindon types are always shorter than 120mm.

Early Iron Age axes can therefore be divided into two separate groups of larger axes and smaller axes (fig. 5.63). One group consists of a group of light-weight axes weighing around 100g and the other group of heavier axes weighing c. 400g (fig. 5.64). The light-weight axes fall into three different categories: East Rudham type axes which weigh around 200g, Hindon type axes which weigh just over 100g and Portland type axes which weigh around 100g (fig. 5.64).

The individual variants of Sompting type axes are not clearly separated by their weight, even though Sompting axes of Kingston variant are lighter than the Figheldean Down variant. However, when looking at the mouth ratio, axes of

Cardiff II variant show the greatest tendency to display a square mouth shape rather than a sub-rectangular one (Figures 5.62 and 5.63).

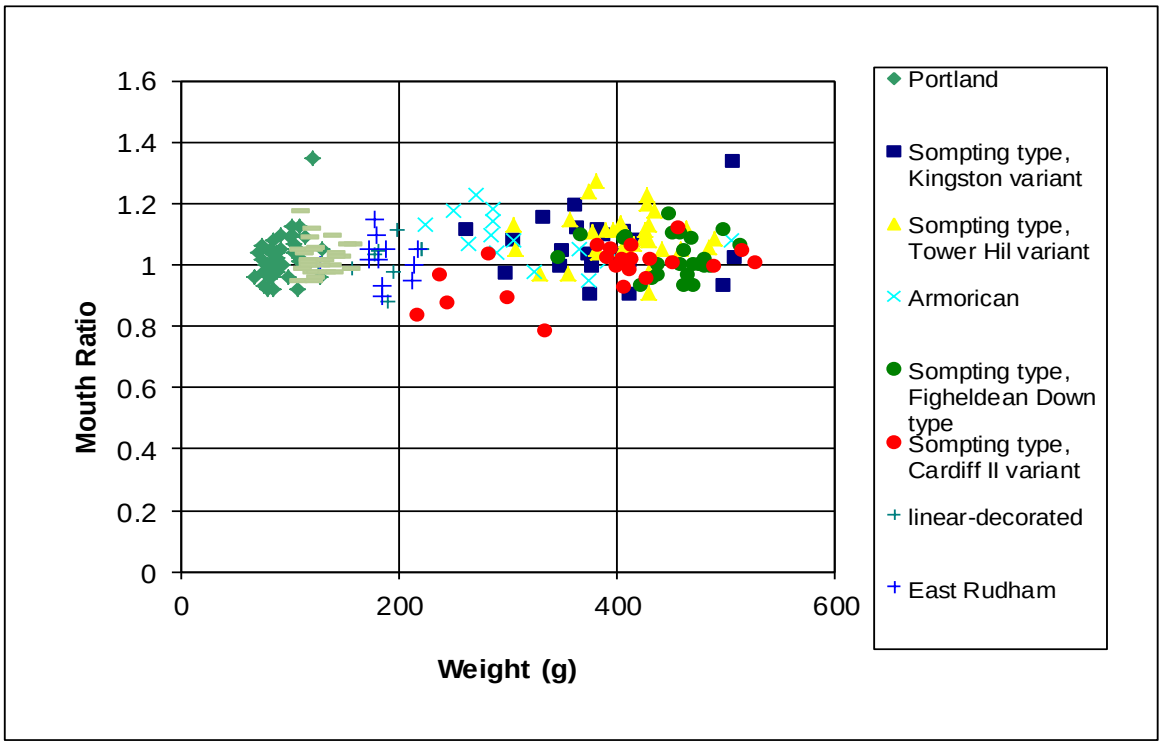


Figure 5.64: Comparative analysis of the weight and mouth ratio of Early Iron Age axe types

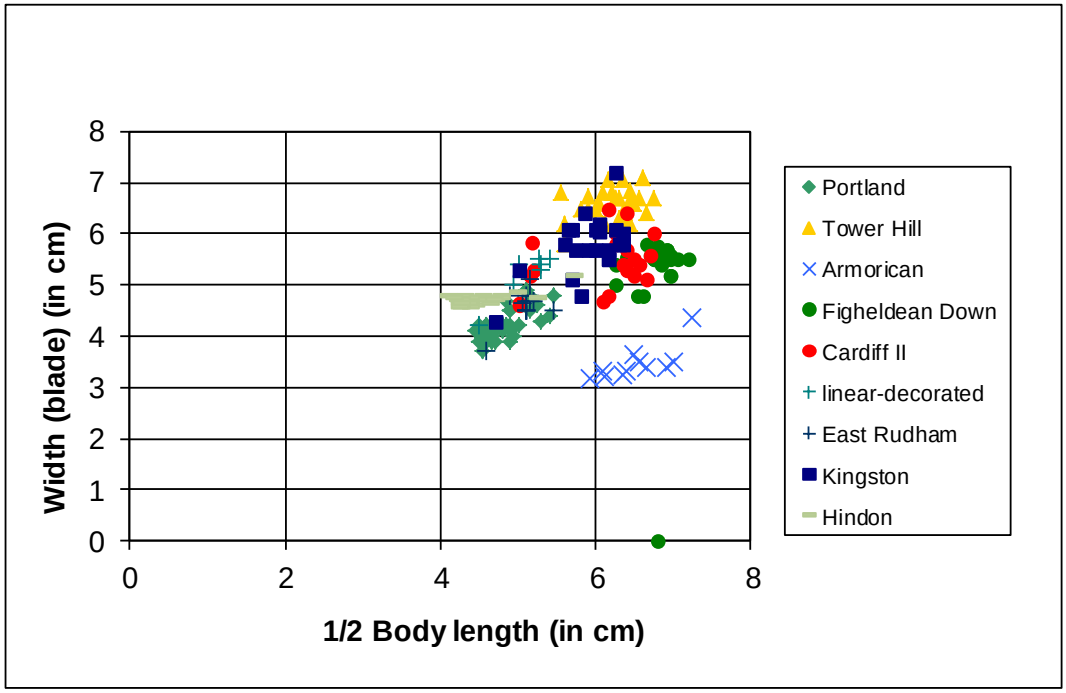


Figure 5.65: Comparative analysis of the blade width and ½ body length

Socketed axes of the four Sompting variants are larger and heavier than axes of East Rudham, Portland and Hindon types, but the individual variants differ from one another in shape and blade width (figs. 5.65-5.69).

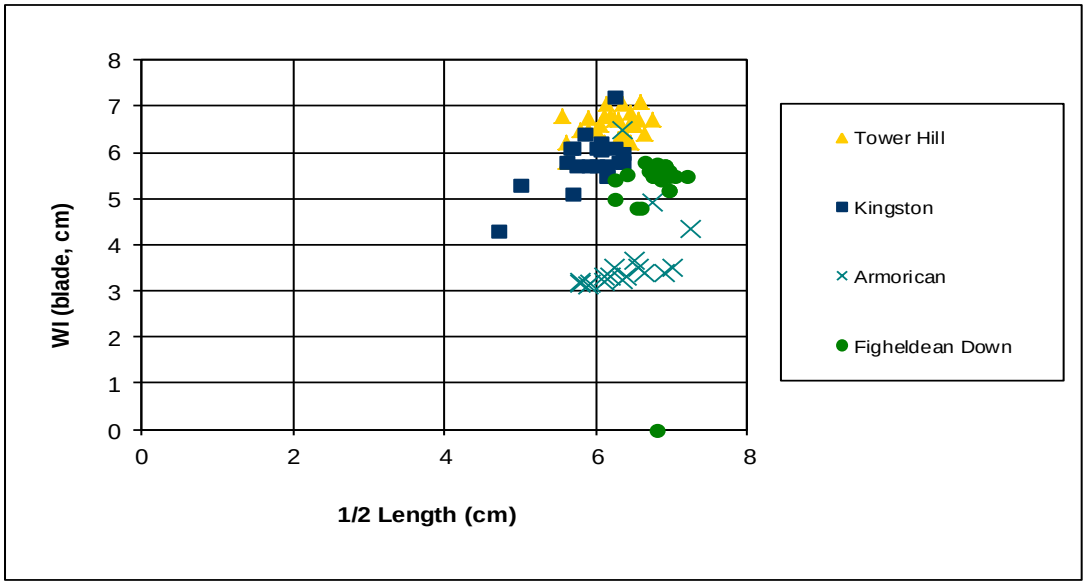


Figure 5.66: Comparative analysis of the blade width and ½ body length (detail of fig. 5.65 without smaller axes types and Sompting type axes of Cardiff II variant)

While socketed axes of Figheldean Down variant are very long, but with narrow blades, socketed axes of the Kingston variant display a much more triangular shape with a shorter body and a wider blade, but not as wide as the blade of socketed of Tower Hill variant (figs. 5.65+5.66).

With their narrow blades but elongated body shape socketed axes of the Sompting type, Cardiff II and Figheldean Down variants appear to share a similar shape with Armorican axes which have an even narrower blade: Armorican type axes have the least triangular shape of all Early Iron Age axes and appear as a very homogenous group. Axes of the Sompting type, Figheldean Down, Tower Hill and Kingston variants appears as very distinct groups when grouped by their shape (figs. 5.66).

These three homogenous looking variants of the Sompting type can be explained by the fact that most of the axes of the Tower Hill variant come from the Tower Hill hoard (Oxfordshire, nos. 932-953) and almost all of the axes of

Figheldean Down variant come from the Mylor (Cornwall, nos. 147-179) and Figheldean Down hoards (Wiltshire, nos. 1029-1050).

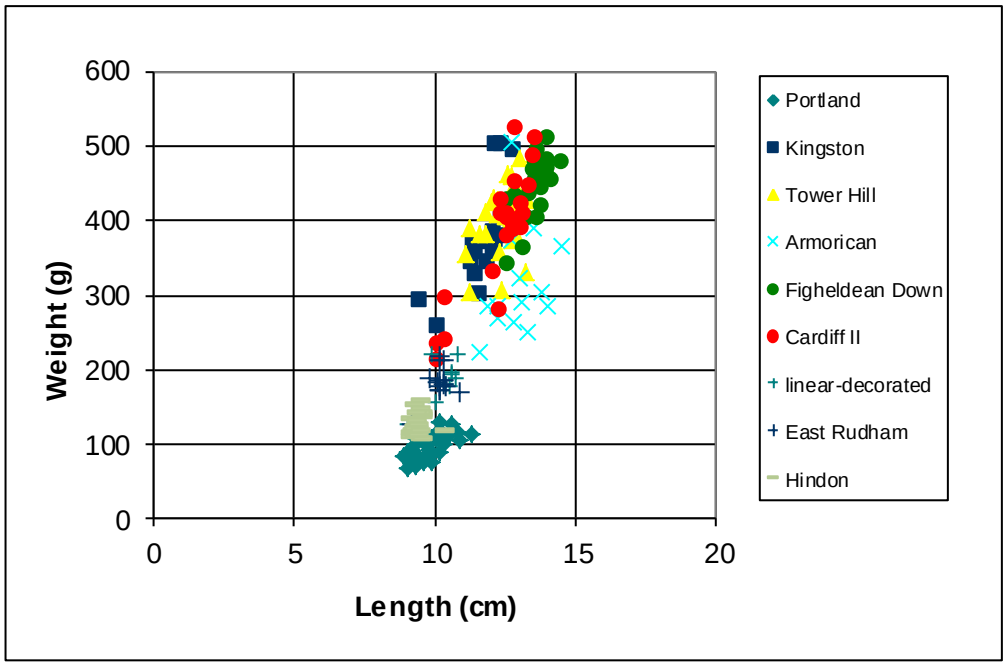


Figure 5.67: Comparative analysis of weight and body length

These three hoards (Mylor, Cornwall; Figheldean Down, Wiltshire, and Tower Hill, Oxfordshire) include a large number of socketed axes that were arguably made in the same mould or else, made from the same mould template (Coombs 1979; Coombs *et al* 2003; Bruns and Needham 2008). Socketed axes cast in the same mould or made from the same mould template will naturally share a very similar size, that is their overall length and blade width while the weight is dependent on the alloy use. The shape of the blade can be slightly changed through hammering, as can be seen on axes nos. 945+952 (Plate 60), but axes deposited in as-cast condition confirm that generally, axes were cast with either a narrow blade (e.g. no. 147-179; Plates 15-21) or a wide blade (e.g. nos. 936, 942, 945+952; Plates 55-60). Therefore, the general shape of the blade was determined by the mould and not by re-shaping after the casting and cooling processes.

The shapes of socketed axes of the Kingston and Tower Hill variants are very similar, but the blades of Tower Hill axes are more widely splayed than those of

Kingston axes, while the bodies of Tower Hill variant axes are ever so slightly narrower (fig. 5.68).

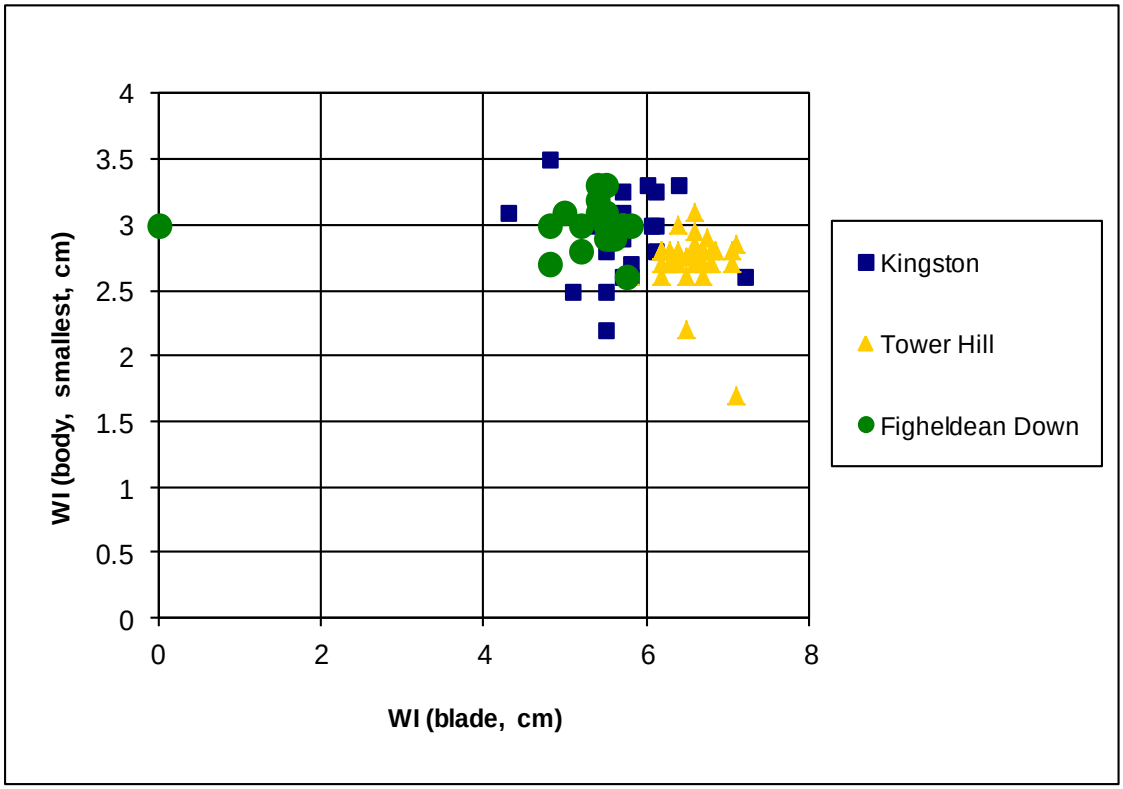


Figure 5.68: Comparative analysis of blade width and smallest body width of Sompting variants Kingston, Tower Hill and Figheldean Down (WI=Width)

At the other end of the spectrum, Sompting type axes of Figheldean Down and Cardiff II variants also appear very similar in shape and size (figs. 5.65 and 5.67). However, Figheldean Down variant axes are slightly longer and slightly narrower than axes of variant Cardiff II (Figure 5.69). Figheldean Down axes are long and slender and have a very narrow blade whilst blades of Cardiff II axes can be slightly or moderately expanded, although never as expanded as blades of axes of variants Kingston and Tower Hill. In terms of shape and size variants Cardiff II and Figheldean Down axes are very similar to Armorican axes which are also long and slender but have an even narrower blade.

Cardiff II and Figheldean Down also differ in modes of deposition. While most axes of variant Figheldean Down were found in two hoards (nos. 1029-1050: Figheldean Down, Wiltshire, and nos. 147-179: Mylor, Cornwall), the majority of axes of variant Cardiff II were discovered singly (e.g. no. 978: Lakenheath,

Suffolk; no. 810: Winwick, Lancashire). This difference in deposition practice is also mirror in socketed axes of Kingston and Tower Hill variants: while most axes of Tower Hill variant were found in the hoard found at Tower Hill (Oxfordshire, nos. 932-953), nearly all axes of Kingston variant were found singly.

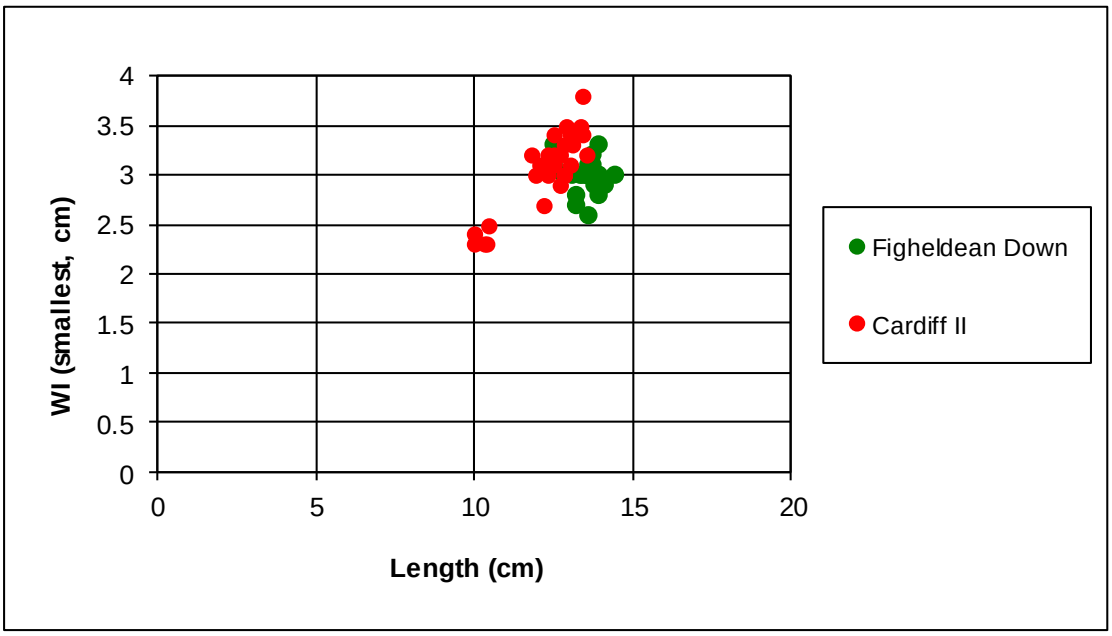


Figure 5.69: Comparative analysis of smallest body width (WI) and overall length of Sompting variants Figheldean Down and Cardiff II

This single find/hoard separation can also be found in the individual variants decoration. While axes of Kingston and Cardiff II variants can be decorated with sometimes very elaborate moulded decoration, axes of Figheldean Down and Tower Hill variants tend to be either plain (Tower Hill variant) or decorated with just plain ribs (Figheldean Down variant).

5.7.2. Decoration

Most Early Iron Age axes are either much smaller or much larger than Late Bronze Age axes and also, they are either much lighter or much heavier. The blades of the larger axes of Sompting type are often widely splayed and the sockets are normally sub-rectangular (or back-to-front-shaped), while the sockets of Late Bronze Age axes are usually aligned with the blade.

Figure 5.70: Sompting type, Cardiff II variant (no. 806, River Thames at Erith)

While Late Bronze Age axes are plain or simply ribbed, almost all Early Iron Age socketed axes are decorated with ribs, ribs-and-pellets or rib-and-circlets, the only exception being most axes of Sompting type, Tower variant, which are plain. Simple rib-and-pellet decoration is especially prevalent in axes belonging to the Cardiff II variant of the Sompting type and Portland type axes (e.g. nos. 84: Lode, Cambridgeshire, Plate 7; 806: River Thames at Erith, fig. 5.70 and Plate 40; 1065 and 1082: Salisbury, Wiltshire, fig. 5.69). Slightly more extravagant variations include rib-and-multiple-circlets, bundles of ribs terminating in pellets (no. 204: Chagford, Devon; no. 93: Horningsea, Cambridgeshire), double-rib-and-circlets and the basic rib-and-pellet ornament with herring bone lines between the ribs, as exemplified on the axes from Newton (Cambridgeshire, no. 96, Plate 12), Boughton (Norfolk, no. 897), Attenborough (Nottinghamshire, no. 922) and Preston Capes (Northamptonshire, no. 1393, Plate 144). Some socketed axes of Sompting type display even more elaborate patterns, like box-shapes, as seen on the axes from Lode (Cambridgeshire, no. 85, Plate 8), Figheldean Down (Wiltshire, no. 1039, Plate 81) and Skipsea (Yorkshire, no. 1239), or the unique Omega-shape which can be found on the axe from Kingston (Surrey, no. 991, fig. 5.72, Plates 69-70).

Figure 5.71: Two Portland type axes from the Salisbury hoard (Wiltshire, nos. 1065 and 1082)

This very sudden adoption of elaborately decorating socketed axes (but not other types of metalwork) and the drastic change in their size, shape and weight which went along with it, indicates a radical change in the perception of socketed axes during the transition from the Late Bronze Age to the Early Iron Age.

Their primary use and function had changed from tools without much variation in shape, size and weight (generally about 200g at 10cms) to a much wider, more variable range of uses evidenced in the broader range of socketed axes available. They ranged from 100g/9cms (Portland type) to 500g/13cms (Sompting type).

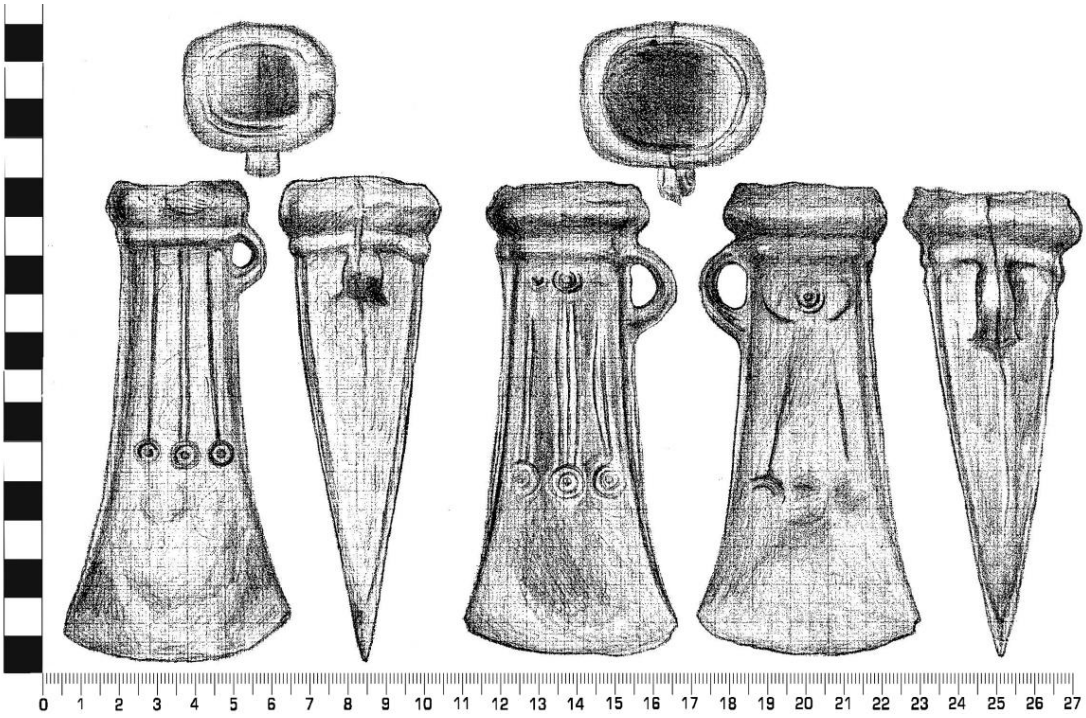


Figure 5.72: Two Sompting type, Kingston variant axes from the Kingston hoard (Surrey, nos. 990+991)

5.7.3. Colour

The aspect of colour has rarely been addressed in discussions of bronze metalwork. It was assumed that even though bronze metalwork is, when recovered, of green, brown, black or dull golden colour or with multiple colours on one axe, it would have initially been of an even dark golden colour. None of the Late Bronze Age axes show any alteration of this colour.

Figure 5.73: Hindon type axe after conservation (Wiltshire, no. 1361)

In the corpus of Early Iron Age axes on the other hand we find axes with a bright silver surface, especially on axes of Hindon, Portland, Blandford and East Rudham types (figs. 5.73+5.74). The unusual silvery surface colour is due to the dominant presence of the delta eutectoid intermetallic compound at the surface, which is clearly visible as a characteristic microstructure (Meeks 1993a; 1993b; Roberts *et al* 2015, 8). Roberts *et al* (2015, 8) suggest that an alternative explanation for the silver colour could be a further enrichment in eutectoid during casting by the 'tin-sweat' phenomenon. This does not mean that the surface becomes enriched in metallic tin but that the alloy solidifies and the remaining molten metal enriches in tin up to the eutectoid composition of 27%, as shown in the phase diagram (Roberts *et al* 2015, 7-9). Roberts *et al* (2015, 8) further argue that during solidification and cooling, the axe shrinks in the mould and it can force this remaining tin-rich liquid metal to the surface through fine inter-dendritic pathways, where it solidifies as a continuous eutectoid microstructure: the result is an axe with a shiny silver surface.

Figure 5.74: East Rudham type axes (nos. 845-886), especially no. 38 in image with silvery surface

This deliberate change in surface colour is best exemplified in Early Iron Age socketed axes of Hindon, Blandford, Portland and East Rudham types but it also occurs on one axe of Sompting type, Kingston variant: no. 1396 from the Ulverston Hoard, Cumbria (Plate 146). Generally, however, axes of Sompting type have not been made with a deliberate silver surface colour. The silver surface colour is unknown on transitional axes, linear-decorated and Armorican type axes. However, iron socketed axes would have had a silver colour which was probably slightly duller and darker, but still similar to that of Hindon, Portland, Blandford and East Rudham type axes. Iron axes were naturally silver in colour, though, while the colour on the copper-alloy axes' surfaces was deliberately changed.

5.7.4. Decoration and Colour: Discussion

Looking at British Late Bronze Age and Early Iron Age pottery and metalwork, Kristiansen argued that items of British manufacture displayed, on the whole, a certain lack of sophistication and imagination and could not be matched in stylistic artistry with contemporary metalwork from the Nordic Circle; neither did they compare in technical mastery with items made in the specialist workshops of the Central European Hallstatt Culture (Kristiansen 1998, 144-146). However, while Kristiansen's observations about British Late Bronze Age metalwork and pottery may be true, they are certainly not accurate for our corpus of Early Iron Age socketed axes.

Figure 5.75: Socketed axe of Sompting type, Cardiff II variant (no. 74: Hotwells, Bristol)

There are only few British Early Iron Age types of socketed axes which do not display any kind of decoration, design or unusual surface finish, notably most Sompting type axes of the Tower Hill variant and the vast majority of Armorican type axes (Briard 1965, 198).

The decorated British Early Iron Age socketed axes, however, – from specimens found in the North of Scotland to axes from Dorset and Sussex – display an ornament that is invariably related to the basic rib-and-pellet or rib-and-circlet design seen very prominently on axes of Sompting type, Cardiff II variant (figs. 5.68, 5.69 and 5.73). This conservative and surprisingly wide-spread employment of a very simple decoration need not be a 'lack of sophistication' but indicates the importance of the motif and its strong, almost permanent connection to the appearance of the socketed axe. Like their bulbous mouth mouldings and the small side loop, their rib-and-pellet or rib-and-circlet designs were inherently linked to how a socketed axe was perceived and what an axe was, being as much a part to the fabric of the object as the bronze used to make it.

Kristiansen's argument that metal objects of the British Late Bronze Age and Early Iron Age lack sophistication and imagination is certainly not supported by the corpus of cast copper-alloy socketed axes.

Figure 5.76: Part of Carlton Rode Hoard, Norfolk (Photographed in Norwich Castle Museum)

Writing on the subject of decoration on socketed axes Huth (2000, 182) suggests producers of socketed axes were free to choose from a whole range of forms and ornaments; but one might ask, if they were free to choose, why were they not more diverse? The rib-and-pellet ornament is not a new design or an invention of Early Iron Age metalworkers. The first rib-and-pellet decorated axes, with pellets shaped like drops or tears at the end of the ribs rather than separate pellets, are occasional additions to Late Bronze Age

hoards of the Ewart Park assemblage and appear in East Anglian and Kentish hoards in association with Carp's Tongue and Ewart Park material, such as the hoards from Carlton Rode (fig. 5.67), Eaton and Norgate Road (Norwich, Norfolk), Feltwell Fen (Norfolk) and Reach Fen (Cambridgeshire) (Huth 2000, 182-183; Coombs 2003, 204). Huth suggested that the rib-and-pellet ornament, which can also be found on axes and palstaves in Iberia and South East Europe may have been a metalworker's mark indicating who made the axes rather than purely decorative (Huth 2000, 184) but this seems speculative and hard to prove for our British Early Iron Age socketed axes. Huth further suggests that the reason for why this motif was applied lies within the medium of the axe itself as rib-and-pellet ornament is not found on any other item of Early Iron Age metalwork (Huth 2000, 184).

It is difficult to wholly agree with Huth's arguments on the basis of the British evidence. Socketed axes in Britain followed a natural development; earlier flanged and winged axes were not necessarily highly decorated and the rib and pellet ornament seems to have originated with them in Late Bronze Age contexts (Coombs 2003, 204). It should be pointed out here that the main reason for lack of decoration on winged axes and palstaves may have been the lack of visible surface once they were hafted: the haft would have obscured all decoration expect for what was applied to the wings. In contrast, the outer surface of socketed axes would have been almost inevitably on display because the haft was inside the socket. Thus, unless the decoration was not meant to be seen and obscured by binding or a pouch, the ornament on socketed axes *was* clearly visible to the onlooker.

In Britain the rib-and-pellet motif began to emerge during the Late Bronze Age and was fully developed by the Early Iron Age. In metalwork, it was restricted to socketed axes. It is possible that sword handles made from bone or antler, or wooden hafts or shafts for axes and spears were decorated but evidence shows that the metal itself was not (Savory 1976, 46-55; Savory 1980, nos. 291-294; Heal 1979, 37; Schmidt and Burgess 1981, no. 1576; Needham 2012, 46-48).

Figure 5.77: Sompting type, Kingston variant axe from the Lea Marshes (Thames: no. 666)

The most frequently decorated socketed axes are those of Sompting type, Kingston variant. While Sompting axes of Tower Hill variant are predominantly plain, axes of Figheldean Down variant are mainly ribbed and axes of Cardiff II variant are usually decorated with simple rib-and-pellet decoration, socketed axes of Kingston variant are often decorated with multiple bundles of ribs, diagonal ribs, circlets and pellets-in-circlets (figs.5.75+5.76). Occasionally, axes of Cardiff II variant are more elaborately decorated with crosses (XXXXX) or zigzags (^^^^^ or vvvvv) between the ribs, for example in nos. 897 (Boughton Norfolk), 984 (Mildenhall, Suffolk), 922 (Attenborough, Nottinghamshire) or 1239 (Skipsea, Yorkshire), but generally, the simple rib-and-pellet ornament is repeated.

The socketed axes of this corpus were divided into categories by first examining their size, shape and weight. In addition, their decoration emphasises the differences of the types. While Sompting type axes with simple ribbed or rib-and-pellet decoration (Cardiff II and Figheldean Down variants) have parallel sides and short, curved blades, Sompting type axes with narrow bodies and widely splayed blades (Tower Hill and Kingston variants) are either plain or carry a very elaborate decoration.

Figure 5.78: Sompting type, Kingston variant axe from Syon Reach (Thames: no. 677)

Even though the basic ornament was the same everywhere, the decoration applied to socketed axes was used differently across the regions, as suggested by the lighter, smaller Early Iron Age socketed axes, that is the axes of Portland, Hindon and East Rudham types which all share the same small size, triangular shape, brittleness and, probably, metal composition (Roberts *et al* 2015). The axes of these three types all share the silvery surface sheen as well as their mode of deposition which is predominantly in large hoards (fig. 5.79; Plates 27-28, 42, 140-141). The only two characteristics they do not share – and which quite clearly distinguish them from one another – is their decoration and the region in which they were found: evidence shows that axes of Portland type (with simple rib-and-pellet decoration) are predominantly found in Dorset, axes of East Rudham type (side linear-enhanced facets) were found solely in Norfolk and axes of Hindon type (plain) were probably concentrated in the Wiltshire region to the west of Salisbury (figs. 5.45 and 5.81).

Figure 5.79: Comparison of an example of each a Portland, Blandford, Hindon and East Rudham type socketed axe (nos. 226: Langton Matravers, Dorset (Portland type); 211: Blandford, Dorset (Blandford type), 1361: Hindon, Wiltshire (Hindon type); 843: Cringleford, Norfolk (East Rudham type)

British Late Bronze Age and Early Iron Age axes have universal attributes but their variations are often regionally specific – so the idea of an axe was universal but they were made and consumed locally using regional types and shapes. In the Late Bronze Age socketed axes of South Wales/Stogursey,

Yorkshire and South Eastern types are valid examples for this regionality (Schmidt and Burgess 1981). Importantly socketed axes were not only understood and appreciated by their makers and those who used them, but also by those who witnessed their casting and deposition. Bradley (2002, 10) argued that material culture was active; for example, it could be used to distinguish between different groups of people living in different geographical regions.

Early Iron Age socketed axes of Portland, Blandford, Hindon and East Rudham types are undeniably very similar which makes it unlikely that they were developed independently yet simultaneously in Dorset, Wiltshire and Norfolk (figs. 5.45 and 5.81). It may be possible therefore that the idea of a small, brittle, very silvery, shiny looking socketed axe was developed in one area, and adopted in the other two.

Bradley (2002, 12) suggested that because material culture is used expressively, it must have been made by someone mindful of what already exists or existed in the recent past. In connection with the practice of adopting how material culture was used in other English regions, Bradley's argument translates well to Early Iron Age peoples of Eastern and Southern England, as evidenced by the similarities and dissimilarities of Portland, Hindon and East Rudham type axes. In the three areas of Norfolk, Dorset and Wiltshire, the mode of deposition, that is multiple rather than single depositions, as well as the deposited objects (shiny, silvery looking socketed axes) were shared, but they stand out through their individual decoration which is not shared (fig. 5.79).

Figure 5.80: Linear-decorated axe from the Fens at Ely (Cambridgeshire, no. 88)

The linear decoration on East Rudham axes strongly

relates to contemporary linear-decorated axes (fig. 5.80). Linear-decorated axes share exactly the same decoration, but are heavier and often show definite signs of use and re-sharpening, as seen on nos. 81-82 (Wicken Fen, Cambridgeshire), 86 and 87 (near Cambridge, Cambridgeshire) and 89 (Reach, Cambridgeshire). In Dorset and Wiltshire, on the other hand, there is no related contemporary or preceding plain or rib-and-pellet decorated axe type. The geographically closest rib-and-pellet decorated axes were rib-and-pellet decorated socketed axes of South Eastern type dating to the preceding Late Bronze Age period and contemporary Armorican axes of Variant Brandivy (Briard 1965, 247-250, fig. 93.8.9; Huth 2000, 182-183; Briard 2001, 140).

This phenomenon of the deposition of non-functional socketed axes which were created for show or symbolic deposition is not limited to Britain, however: Geistingen type axes from the Netherlands, Belgium and West Germany are similar to British Portland type and related axes (Butler and Steegstra 2001-2002, 304). Unlike Portland and East Rudham axes, Geistingen axes have an elongated, narrow body, but they share the thin walls and the high tin/lead contents and the silver surface sheen as well as a very limited area of distribution. Butler and Steegstra suggest that all Geistingen type axes were products of a single workshop, their largest hoard (from Geistingen) pinpointing the centre of distribution (Butler and Steegstra 2001-2002, 304).

Thus, if a bias of distribution indicates local centres of production, we can now isolate three centres of production for three different local axes types: at East Rudham (Norfolk, for East Rudham type axes), Langton Matravers (Dorset, for Blandford and Portland type axes) and Hindon (Wiltshire, for Hindon type axes) (fig. 5.81). The similarity in shape and metallurgy of the individual axes types is evidently offset by the unmistakable modification in style of decoration which suggests a strong tendency for the display of individuality in the separate regions.

East Rudham, Portland and Hindon axes represent an interesting case; they have different decoration, but similar shape and shared a parallel depositional context. This suggests some connectedness – each depositing community remained unique but shared the character of the event with common deposition practice.

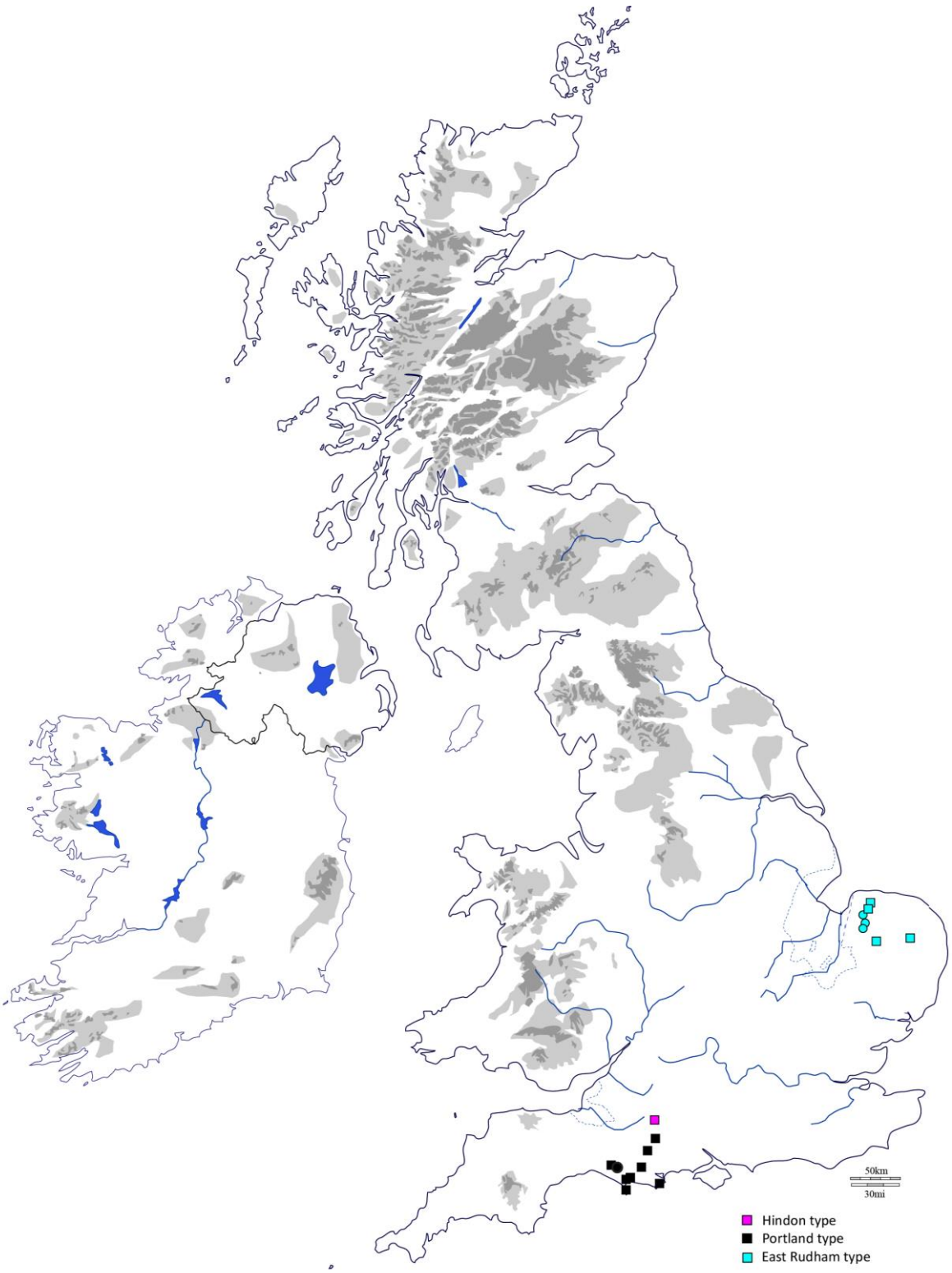


Figure 5.81: Distribution map of Portland type, Hindon type and East Rudham type axes

In short, these events were probably the result of a co-operative group from the combined areas using local material to create a powerful shared memory.
Besides their brittleness, Portland, East Rudham and possibly also Hindon type axes display two further features which are rarely seen on other other Early Iron Age axes: they were sometimes deposited in very large hoards (for example at Langton Matravers, Dorset, nos. 226-598), but within these hoards the shape and morphology of the individual axes show that even though many of them look virtually identical, they were not made from the same mould template (Roberts *et al* 2015).

Figure 5.82: Portland type axes from the Portland Hoard (Dorset, nos. 603-606)

The large number of axes and the surprisingly small number of mould matches in the assemblages from Langton Matravers would suggest that a lot of work had gone into their production – *if* the axes had been made by one single person. It would have been much less work if many people had made the many different moulds: this in turn would suggest a community effort where the individual moulds were prepared by individual people – and not necessarily by skilled metalworkers. This may explain the crudeness of some of the Portland type axes (for example nos. 603-606: Portland, Dorset; Plates 28-29 and fig.

5.82). However, while a clay mould for socketed axes could have been made by anyone, the preparation of the alloy and the actual casting needed to be done by a skilled metalworker.

The surface colour of these axes, especially those of Hindon type, is a brilliant silver which was almost certainly the desired effect, as suggested by the axes' metallurgy (Roberts *et al* 2015). The deliberate change of surface colour on prehistoric metalwork is not wide-spread and it is unknown on Late Bronze Age socketed axes.

Colour is a significant aspect of every object used by people: it is probably what people would notice first when they see an object and it may be the reason for why they pick it up or not. Furthermore, colour can indicate whether they are allowed to touch it or not; it can mark an object as off-bounds. Colour is a powerful visual stimulus and must not be underrated. Hurcombe suggested that we have not appreciated the subtle use of colour on the surface of archaeological objects in the past (Jones and McGregor 2002; Hurcombe 2007, 115). However, due to metal corrosion in the ground and the resulting change of an object's surface colour it is often not possible to see what colour the surface was initially intended to be. Thankfully, not all axes of Portland, Hindon and East Rudham types were affected by corrosion and most of them still retain patches of their original surface area with only minimal patination. The question arises why the colour of these axes was changed and why the surface was made to look silver. Silver was not well-known or used in the Late Bronze Age and Early Iron Age and no silver objects were in circulation. However, during the transition period people started to use iron and a finished iron object will have a shiny silver surface. The novelty of a metal object with a silver surface may have sparked the desire to cast silver socketed axes. That, of course, is impossible because socketed axes were made from copper alloy which cannot be alloyed with iron. However, through tin enrichment during the casting process socketed axes can be given a silver surface. The casting would not necessarily result in a usable tool but the axe would end up having the desired silver surface. Effectively, it would be a socketed axe that very much looked like it was made from the new metal iron.

While the colour of the new metal may have been more desirable in the first place, metalworkers tried hard to stick with the traditional shape of tools when it came to working the new metal iron. Thus, the first iron socketed axes were made in the image of cast copper-alloy socketed axes, even though the shape of the socket does not suit the properties of iron at all (Hingley 1997, 14-15). It was easier to fold over the sheet of iron and create an axe resembling a shaft hole axe (for example no. 1402: Rahoy, Argyll, Plate 149; Manning and Saunders 1972, 279). However, socketed axes had been around for more than a century at that time and it was the final shape that the Bronze Age axe development had arrived at after centuries in the making – giving it up or taking a step back and making an axe that resembled Neolithic and Early Bronze Age shaft hole axes may have taken some time to get used to, although recent evidence from Shepperton (Surrey, no. 1408) suggests that shaft hole axes had never quite gone out of fashion (Needham 2012, 43-45).

Thus, skeuomorphism was visible in both bronze and iron Early Iron Age socketed axes. The deliberate application of a silver surface to Portland, East Rudham, and most of all, Hindon type socketed axes show the appreciation people must have had for the new metal and the new look that it would have brought with it. Iron socketed axes have no decoration perhaps indicating that at this early stage of iron-working, and without the ability to cast it in moulds, such fine decoration was impossible (Manning and Saunders 1972, 279). However, after more than two millennia of accumulation of bronze-working knowledge it was possible to use the properties of a certain high-tin alloy to create socketed axes with a surface that shone like silver not dissimilar to that of freshly wrought iron, whilst also incorporating the desired rib-and-pellet or linear-ornament on the axes' faces.

The desire to make iron socketed axes look like their bronze forerunners is understandable and the evidence suggests that the metalworkers faced the challenge head-on but abandoned the mission fairly quickly: there are only 24 iron socketed axes known from Britain. Even if we take into account that iron does not survive as well in the ground as bronze does, it is highly doubtful that there was ever the same number of socketed iron axes in existence as bronze axes.

While on the one hand metal-workers tried to copy copper-alloy axes in iron, they also wanted to give copper-alloy socketed axes a shiny silver surface that was characteristic for iron metalwork. However, the alloy needed to make silvery-looking axes resulted in very brittle axes with a pitted surface that was prone to damage and splintering. This phenomenon is well attested for in the large corpus of small high tin-alloy axes, as seen above, but it also occasionally occurs on the much larger Sompting axes. Metal analyses have only been carried out on Sompting axes of the Tower Hill and Figheldean Down variants (Rohl and Needham 1998, nos. 400-410; Northover 2003, 221-223) and most axes of Sompting type display a bronze or gold-coloured patina, but there is one instance where the responsible metalworker must have attempted to recreate a silver surface on a bronze axe of Sompting type: in the small hoard from Ulverston (Cumbria, no. 1396). The hoard contains two axes which were most probably made in the same mould or cast from the same template, but they both display a different surface colour (bronze and silver) and a different intricacy in their decoration which can probably be explained by the different alloys used in their casting.

5.8. Conclusion

The corpus of Early Iron Age socketed axes is mainly characterised by its tendency to display extremes. While the socketed axes of the Ewart Park metalwork assemblage, though somewhat different in shape and decoration, were usually of similar weight and size and made from the same metal, an overwhelming number of socketed axes of the Earliest Iron Age do not show the tendency to a uniform shape or weight except in their own groups.

For the first time there was a choice in material and thus we find the first copies of bronze socketed axes in the new material, iron, but they would never reach the sophistication of their bronze counterparts. Thus, the majority of Early Iron Age socketed axes were still made from cast bronze (1389) with only a small number of axes made from wrought iron (24).

Both copper-alloy and iron axes were made in a wide range of different shapes and sizes and the only feature they all share is that they are socketed. The

great majority have loops, and only two iron socketed axes are unlooped (no. 683: Thames Street, London; 1263: Bishop Loch, Lanarkshire).

Early Iron Age cast copper-alloy socketed axes display a wide spectrum of weight, sizes, decoration, wear and colour. They were either very large or very small (for example Sompting type, Figheldean Down and Cardiff II variants (13-14cm) *versus* Portland and East Rudham types axes (9-10cm). While one group is made up of very heavy axes (Sompting type, Figheldean Down variant: 400-500g), another contains only light-weight axes (Portland type axes: 100g). Most Early Iron Age socketed axes belonged to a group of one of the extremes and there were hardly any socketed axes of intermediate weight and size.

While the specimens may be difficult to compare overall, they are all very homogenous within their groups: in the individual typological groups, the individual axes' weights, lengths and blade widths do not differ greatly and their similar decoration and wear patterns support the typological groupings: Sompting type axes of Tower Hill variant are plain, those of Figheldean Down variant are simply ribbed and those of Cardiff II variant decorated with rib-and-pellet decoration. Socketed axes of Sompting type, Kingston variant were often elaborately decorated. Armorican type axes are almost always plain and never though any signs of wear or re-sharpening: they were not used for chopping or cutting. This characteristic can also be found in axes of Sompting type, Figheldean Down variant: these axes are in shape, size and weight very similar to Armorican type axes and they, too, were not prepared for use as wood-working tools. Axes of Sompting type, Kingston variant, were not only often elaborately decorated, they were also always found with clear signs of use and re-sharpening. They cutting edges were hammered into a widely splayed shape, very much unlike the blades of Figheldean Down and Cardiff II variant axes.

Sompting type axes are very different from the group of smaller cast copper alloy axes which includes Hindon, Portland, Blandford and East Rudham type axes. Axes of different types were of slightly different sizes and weights, but they all shared the feature that they were much shorter and lighter than Sompting type axes. Furthermore, none of them showed any post-casting work,

that means none of them went through the final stage of preparing them for cutting or chopping.

Each of these markedly different type of Early Iron Age bronze socketed axes was very probably made to fulfil a specific purpose and their shape, weight, decoration and surface finish as well as the contexts in which they were found can give us a clue as to what that purpose was. Socketed axes of the smaller types (Hindon, Blandford, East Rudham and Portland) were not made for use as wood-working tools or weapons: they were thinly cast and the tin content is too high, making the metal brittle and rendering them ineffective for wood work or other impact. As is the case with Armorican axes, most Portland and East Rudham axes were deposited in as-cast condition and unfinished with their casting seams still intact, blunt cutting edges and possibly remainders of their clay core still inside. However, most of the axes of Hindon, Portland, Blandford and East Rudham types show evidence for a purposefully tin-enriched surface which gives them a very shiny silver surface rather than the dull golden surface a normal bronze socketed axe. One has to ask if this silver surface was deliberately applied to make the axes appear more like the new iron axes. Iron was adopted very quickly as the main metal for tools and weapons but the first attempts at making wrought iron tools were lacking in style and sophistication: iron may have been more readily available than copper and tin, but it was a very different metal to work with. It could not be used for casting and none of the iron socketed axes in this corpus show any evidence for decoration or ornament on their surface. The main reason for this will be their state of preservation, but even the better preserved examples appear plain and undecorated (for example no. 1404 from Traprain Law, Midlothian). If the need for applying moulded ornaments to the surfaces of socketed axes had increased during the Late Bronze Age-Early Iron Age transition (and Sompting type axes strongly suggest that), axes made from wrought iron would have been a disappointment. They could not be decorated like bronze axes could. However, it was possibly for Early Iron Age metalworkers to create axes that were both silver in colour like iron axes and decorated like bronze axes:

This growing spectrum in different types of sockets axes, all similar in shape, but very different in size, weight, metallurgy, decoration, surface finish and use strongly suggests different uses for the different types.

CHAPTER 6

ASSOCIATED METALWORK AND CONTEXTS

6.1. Associations and Contexts: Introduction

The corpus of Early Iron Age socketed axes discussed in this thesis comprises 1408 specimens: 273 were single finds (19%) and 1135 (81%) were found in metalwork hoards (Figure 6.1.).

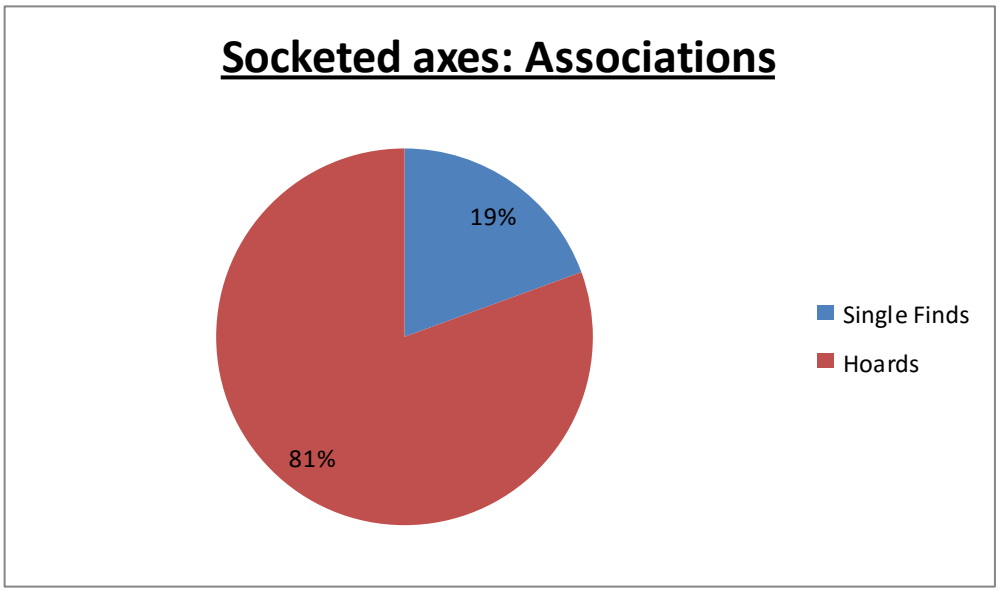


Figure 6.1: Percentages of Early Iron Age socketed axes found singly (273=19%) and as part of metalwork hoards (1135=81%) (N=1408)

While the first part of this chapter will look at the associations of materials and other types of metalwork in Early Iron Age hoards, the second part will look at the contexts of both Early Iron Age hoards and single finds.

6.2. Associations: Introduction

This section will look in detail at hoard contents. For metalwork hoards, one of the most important aspects of their depositional context is the association of artefacts within the individual deposits that is their number, type, dating and condition. While they may contain a wide range of artefact types, hoards very rarely incorporate items made from other materials such as pottery, stone, amber,

glass or shale. The only known exception is the hoard from Mylor (Cornwall, nos. 147-179), where part of the container survived (Plates 15-17).

Figure 6.2: Ben Roberts and Peter Woodward sorting and studying the axes from Langton Matravers (Dorset, nos. 229-598); image courtesy of B. Roberts/BM/PAS

Hodder and Hutson (2003, 5) argued that identical objects can have different meanings if discovered in different contexts which can be translated to socketed axes of the same type found in very different hoards, especially if the hoards were also found in two very different geographical locations. For example, a socketed axe of Portland type that was deposited in an axe hoard on the Isle of Purbeck requires a different contextual interpretation from an identical socketed axe of Portland type that was found in a mixed multi-period assemblage on Salisbury Plain (i.e. Langton Matravers, Dorset: nos. 226-598; Salisbury, Wiltshire: nos. 1061-1202).

In our 54 Early Iron Age hoards, the number of items deposited ranges from two artefacts to groups of over a hundred items, such as the hoards from Salisbury (Wiltshire, nos. 1061-1202; 141 socketed axes) and Langton Matravers (Dorset, nos. 226-598; 373 socketed axes, fig. 6.2).

6.2.1. Associations: Hoard composition

The composition of Early Iron Age metalwork hoards is very different from the composition of traditional Late Bronze Age hoards which often include heavily used, broken-up weapons, tools and ornaments (Taylor 1993, Huth 1997, Turner 2010): in contrast, Early Iron Age hoards very often include complete artefacts in good or even as-cast condition.

Early Iron Age hoards do not only stand out because some of them were collections of artefacts in as-cast condition or hoards containing artefacts from the Early, Middle or Late Bronze Age, they were also the first hoards to include objects made from a different non-precious metal: iron.

Only 15 of our 54 Early Iron Age hoards include objects other than socketed axes making socketed axes the single most dominant artefact type deposited in the Early Iron Age. According to type and number of associated objects, Early Iron Age hoards may be divided into two main groups: *axe hoards* and *mixed hoards*. As the names suggest, axe hoards include only socketed axes and fragments thereof whilst mixed hoards are associations of socketed axes with other items of metalwork. Considering some marked differences in the contents of the individual hoards a further sub-division is necessary:

1. Axe Hoards
    a. Axe Hoards
    b. Axe-Dominated Hoards
2. Mixed Hoards
    a. Mixed Hoards (i.e. with contemporary objects)
    b. Multi-Period Hoards (i.e. with curated, older objects)
    c. Fragmented Hoards

While the differences between axes hoards and mixed hoards are very distinctive, the differences between axe hoards and axe-dominated hoards and mixed, multi-period and fragmented hoards are more subtle:

1a. Axe hoards: hoards composed of 100% socketed axes and socketed axe fragments

1b. Axe-dominated hoards: hoards composed of more than 50% of socketed axes, associated with a small variety of other metalwork

2a. Mixed hoards: hoards composed of less than 50% axes, associated with an often large variety of other metalwork

2b. Multi-period hoards: hoards composed of less than 50% axes, associated with artefacts dating from the preceding Early, Middle and/or Late Bronze Age periods as well as succeeding Middle and Later Iron Age periods

2c. Fragmented hoards: hoards composed of broken up metalwork (more than 90%)

6.2.2. Associations: Axe hoards

Nearly three quarters of all Early Iron Age hoards can be classed as axe hoards (39 hoards: 72%; N=54). Axe hoards are normally composed of two or more complete specimens, but they may also contain fragments of socketed axes, for example in the hoards from East Rudham (Norfolk, nos. 845-886; Plates 42-43) and Langton Matravers (Dorset, nos. 226-598). If a hoard contains only socketed axes or fragments thereof, they are generally of one type only, as can been seen in the hoards from Watton (Norfolk, nos. 889-894, fig. 6.3), Portland (Dorset, nos. 599-609: Portland type axes), Mylor (Cornwall, nos. 147-179: Sompting type axes, Plates 15-21) and the hoard from near Southampton (Hampshire, nos. 705-772: Armorican type axes). Cross-overs of different axe types in individual axe hoards are very rare, but they do occur, especially between closely related types, such as socketed axes of Sompting type, Kingston and Tower Hill variants and Portland and Blandford type axes (e.g. from Ulverston and Skelmore Heads, Cumbria: nos. 193-198 and nos. 1395-1397 and from Thorney Down and Langton Matravers, Dorset: nos. 610-617 and 226-598;

Figure 6.3: Six of the seven axes of the Watton hoard (Norfolk, nos. 889-894), all East Rudham type axes

Plates 23+24 and 146+147). Associations of socketed axes of different types occur more frequently in fragmented, mixed and multi-period hoards, but rarely in axe hoards and axe-dominated hoards (see below).

The 39 axe hoards which are composed of mainly one type of socketed axe also stand in stark contrast to the hoards of the preceding Late Bronze Age, where hoards containing broken-up metalwork (e.g. socketed axes, swords, spearheads, chisels and gouges) or tools and/or weapons dominate, as evidenced in, for example, the hoards from Carleton Rode (Norfolk), Bexleyheath and Hoaden II (both Kent) or the Butley hoards (Suffolk) (Cheetham 1977, 31; Perkins 1998, 365-7; Inventaria Archaeologia GB53; O'Connor 1980, 584, List 227, no. 25).

There are no pure axe hoards in the Late Bronze Age, but the Early Iron Age tendency for the predominance of pure axe hoard deposition was foreshadowed in the small number of transitional axe hoards such as the hoard from Manton Copse, Preshute (Wiltshire, nos. 1051-1060; Plates 88-90), Bassingbourn (Cambridgeshire, nos. 77-78; Plates 5+6) and larger hoards such as the hoard from Wymington (Bedfordshire, nos. 1-51) and the axe-dominated hoard from Ketton, Rutland (Leicestershire, nos. 811-826; Figure 6.2.).

It is also notable that none of these transitional axe hoards include any Early Iron Age socketed axe types, and vice versa. There are no overlaps of material between Late Bronze Age and Early Iron Age axe hoards.

This drastic change in hoard composition was accompanied by a change of regional focus in Early Iron Age axe hoard deposition: the focus of deposition had now shifted from South East England, Yorkshire and South Wales to Wessex. The only area that remained as popular for the deposition of metalwork hoards as ever is East Anglia, especially in the area of the Fen edges.

6.2.3. Associations: Axe-dominated hoards

Axe-dominated hoards differ in composition from pure axe hoards in that they do not only include axes, but also other items of metalwork, albeit in small quantities. They main component (normally more than 50%) are socketed axes, but they also include artefacts connecting with horse riding (such as harness rings and phalerae), evidence for feasting (such as cauldrons), weapons (mainly

spearheads and, very rarely, sword fragments), tools (especially socketed gouges, socketed leather-working knives and sickles), ornaments such as bangles and bracelets and lastly, razors.

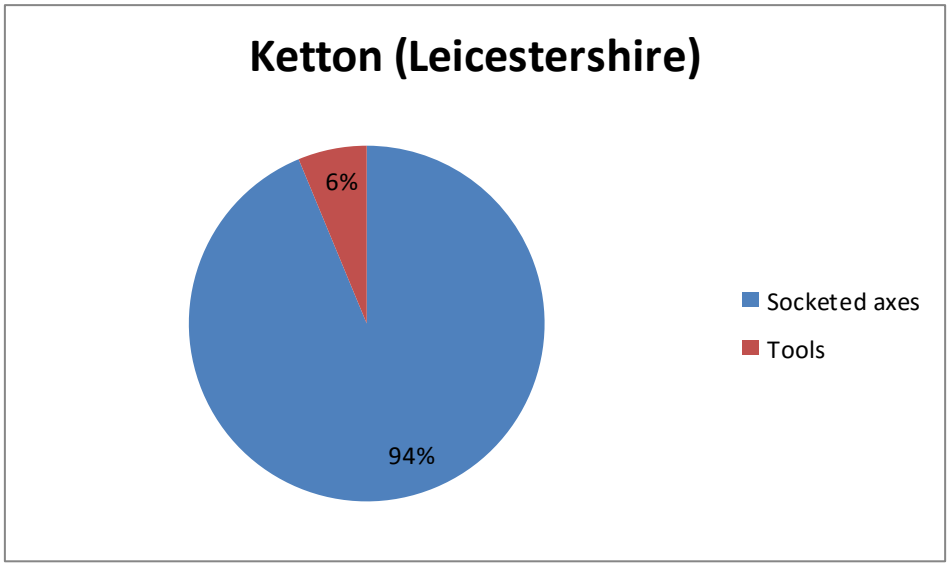


Figure 6.4: Axe-dominated hoard (contents): Ketton (Leicestershire, nos. 811-826)

There are only seven axe-dominated hoards, which are combined 13% of all Early Iron Age hoards. These are the hoards from Tower Hill and Compton

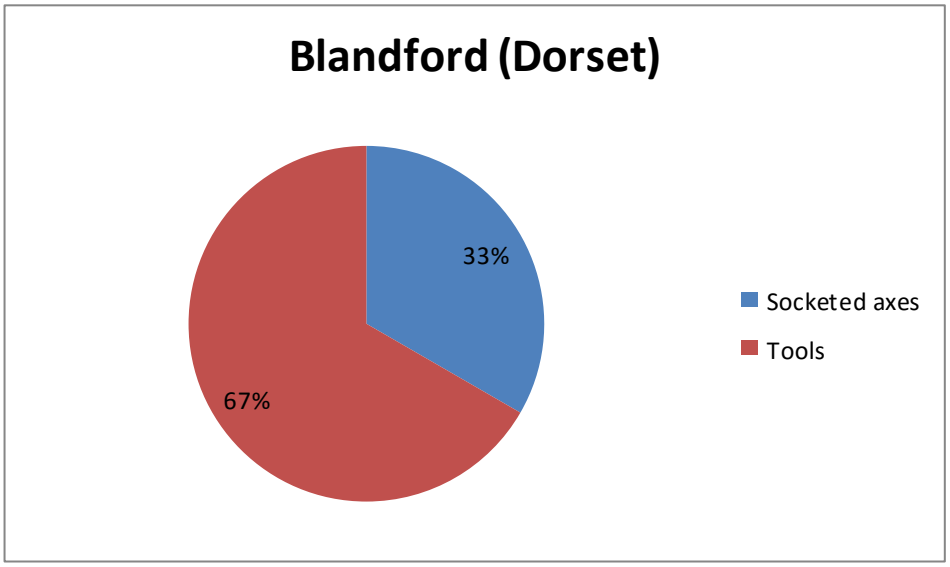


Figure 6.5: Axe-dominated hoard (contents): Blandford (Dorset, no. 211)

Beauchamp (Oxfordshire, nos. 932-953 and 954; Plates 49-61), the hoards from Blandford and Thorney Down (Dorset, no. 211 and nos. 610-617; Plates

25+26; figs. 6.3 and 6.4.), Ketton (Leicestershire, nos. 811-826; fig. 6.2.), Ferring and Sompting (Sussex, nos. 999-1008 and nos. 1009-1025; Plates 72-77) and Hindon (Wiltshire, 1354-1387; Plate 136-141). These seven hoards are characterised by their large number of socketed axes, but also a small number of objects other than socketed axes that they were associated with.

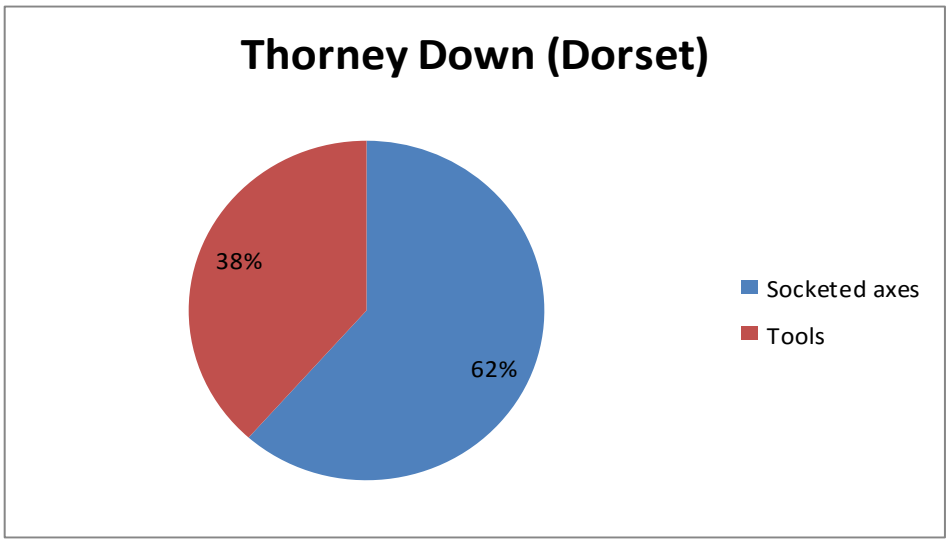


Figure 6.6: Axe-dominated hoard (contents): Thorney Down (Dorset, nos. 610-617)

The two smallest hoards, from Blandford (Dorset) and Compton Beauchamp (Oxfordshire) (no. 211, fig. 6.7, and no. 954) include only one socketed axe each plus one or two other objects: the axe from Compton Beauchamp was associated with a piece of casting waste while the axe from Blandford was found with two small socketed gouges which were also in as-cast condition (Figure 10.5).

The rare small size and composition of the Blandford and Compton Beauchamp hoards suggests that they probably were part of two larger hoards: the small hoard from Compton Beauchamp includes one axe of Sompting type, Tower Hill variant and was found very close to the original Tower Hill hoard, while the hoard from Blandford included only one axe of Blandford type and two socketed gouges. Socketed axes of Blandford type were never found on their own or in a hoard composed solely of Blandford type axes. They were always associated with other axe types, predominantly Portland type axes, but occasionally also Hindon type axes and transitional and Sompting type axes (e.g. at Kings Wes-

ton Down, Bristol, no. 56; Thorney Down, Dorset, nos. 610-617; Salisbury, Wiltshire, no. 1066; Tisbury, Wiltshire, no. 1410; Plates 1+2, 93+94).

Figure 6.7: Hindon type axe, after conservation and cleaning (courtesy of Salisbury Museum)

The two hoards from Dorset (Blandford and Thorney Down) were composed of Blandford and Portland type axes and small, socketed gouges in as-cast condition which appear related to Blandford and Portland type axe, especially in appearance, size and metalwork composition (figs. 6.5. and 6.6.; Northover and Sherratt 1987). Like the socketed axes that they are associated with, these gouges were unfinished and unused and displayed the shiny silver surface typical for Blandford, Hindon and Portland type axes (fig. 6.7). Like Portland and Blandford type axes, these gouges were never found in any of the mixed hoards outside of Dorset, with the exception of the multi-period hoard

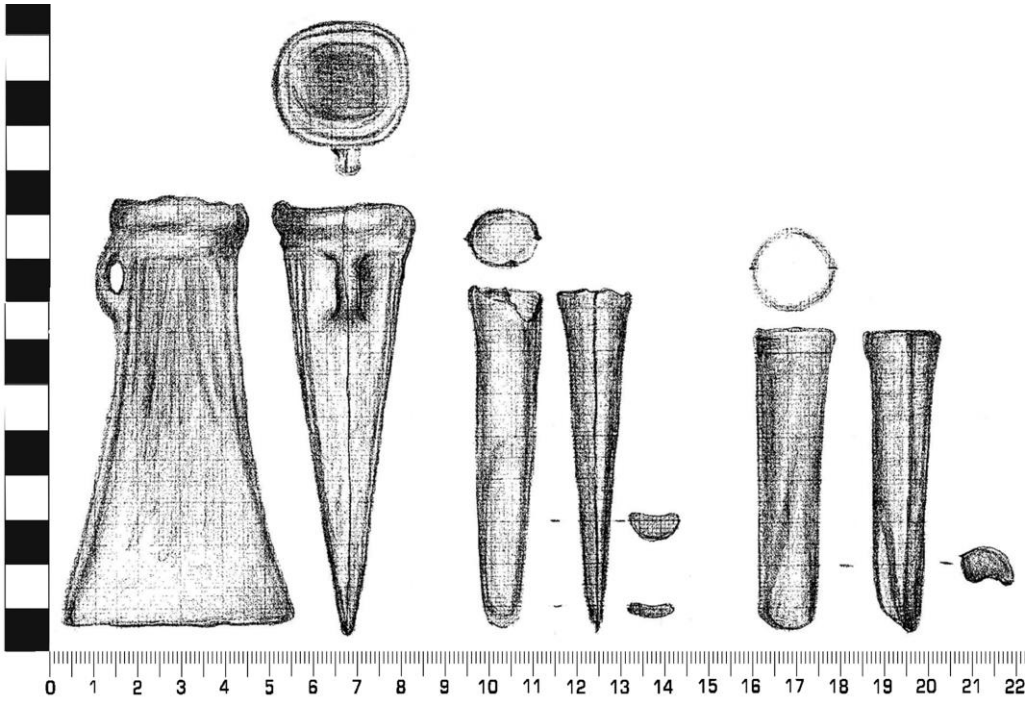


Figure 6.8: Blandford hoard (Dorset, nos. 211): one Blandford type axe and two socketed gouges in as-cast condition

from Salisbury (Wiltshire) that also contained several Portland and one Blandford type socketed axe. There are no single finds of these gouges and the Dorset hoards strongly suggest that specimens of these two metalwork types (socketed axes and socketed gouges) were deposited together. Their metallurgy and surface finish sets the socketed axe and gouges from Thorney Down and Blandford (Dorset) apart from the axes in the two larger, axe-dominant hoards from Tower Hill (Oxfordshire, nos. 932-953), Ferring and Sompting (Sussex, nos. 998-1008 and nos. 1009-1025) but they emphasise a strong relationship to the axes from Hindon (Wiltshire, nos. 1354-1387, Plates 136-141; fig. 6.7). The hoard from Hindon (Wiltshire) is probably the closest relative of the hoards from Dorset because it included 33 socketed axes of Hindon type (nos. 1355-1387) which are closely related to Portland and Blandford type axes. However, the shiny, silvery looking axes from Hindon (fig. 6.7) were not associated with socketed gouges or other tools, but with bronze rings (39, fig. 6.9), bangles (2), several fragments of bronze sheet metal, a socketed axe of Sompting type, Cardiff II variant (no. 1354), three iron spearheads and an iron sickle.

Some of the bronze rings were still connected to strips of folded, riveted, curved sheet metal which are interpreted as strengthening attachments for leather straps which were part of horse harness (fig. 6.9; Boughton 2012). Early Iron Age bridle bits had been found prior to the discovery of the hoard in the same field and by the same finder, but he had dismissed them as ‘modern scrap’

Figure 6.9: Bronze ring with attached folded and riveted strips of sheet metal (part of Hindon Hoard, Wiltshire)

and only showed them to the local Finds Liaison Officer after the discovery of the hoard (Portable Antiquities Scheme database finds identification: WILT-80FA63). Careful excavation of the hoard also brought to light three iron spearheads and an iron tanged sickle which had been deposited together with the bronze artefacts. However, some of the 'bronze' artefacts no longer looked like bronze artefacts: the 33 axes of Hindon type were of shiny silver colour, probably not very much unlike the original colour of the iron spearheads and the iron sickle at the time of deposition (fig. 6.7).

Figure 6.10: The Tower Hill hoard (Oxfordshire, nos. 923-953): the hoard included 22 socketed axes, four hoops/bracelets and many fragments of ornaments, including a quarter of an ornamental disc, possibly Scandinavian in origin (lower left in the image)

The inclusion of copper alloy rings in Early Iron Age metalwork hoards is not unusual, but depending on their size, decoration and wear pattern they are not always interpreted the same. While the large number of plain rings in the hoard from Hindon (Wiltshire) were interpreted as belonging to horse harness (Boughton 2012), the rings found in the Tower Hill hoard (Oxfordshire, nos. 923-953) are better interpreted as bangles or bracelets (fig. 6.10).

The bangles/bracelets from Tower Hill with expanding, ribbed terminals or ring-shaped bracelets without opening but with one single small horizontal perforation do not have any British parallels but occur in Late Bronze/Early Iron Age contexts in both Scandinavia and France. Examples come from metalwork hoards of the Nordic Circles' Periods V and VI (Late Bronze Age/Early Iron Age) from Madelkow, Kreis Soldin; Cassoe, Kirchspiel Jordkirch, Kreis Apenrade; Hemmelsdorf, Kreis Eutin (all from Schleswig, Germany) (Sprockhoff 1956, Tafeln 41, 2; 46, 1-4, 7-8) and Challans, La Villate, Dép. Vendée; Carcassone (area of), Dép. Aude (Huth 1997, Tafeln 48, 1-21; 88, 8-14).

Cast copper-alloy decorative openwork discs or *Zierplatten* like the fragment found in the Tower Hill hoard are an infrequent but also not unusual component of hoards of Period V and VI of the southern regions of the Nordic Circle. Chief examples come from the hoards of Schwarzin (Kreis Berent, Danzig), Klein-Drebnau (Kreis Fischhausen, Königsberg), Borkendorf (Kreis Deutsch-Krone, Danzig), Körlin (Kreis Schlawe, Stettin) and Splawie (Kreis Wreschen, Posen) (Sprockhoff 1956, Tafel 55, 1-5). Except for the example from Schwarzin, all ornaments are circular and the two discs from Klein-Drebnau and Borkendorf also share the grooved outer frame with the fragment from Tower Hill.

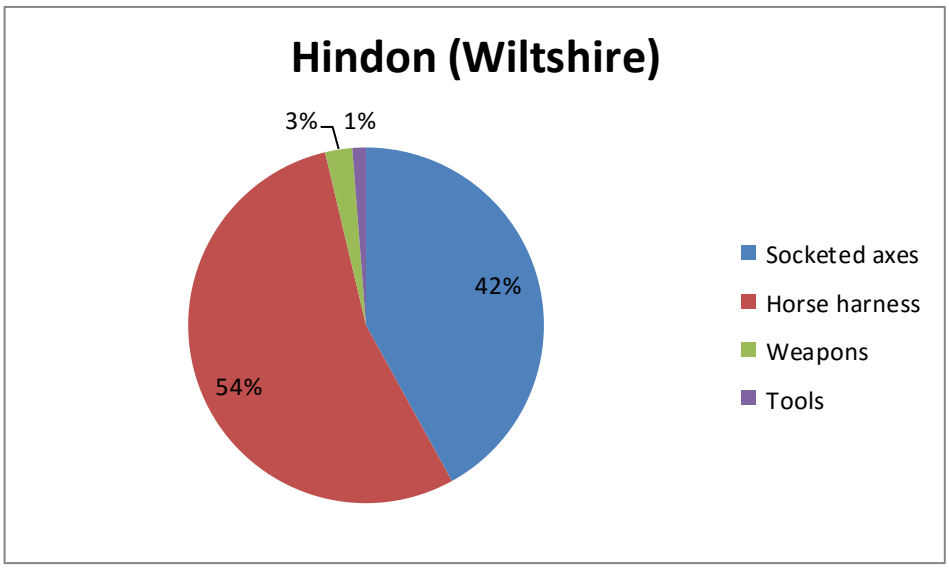


Figure 6.11: Axe-dominated hoard (contents): Hindon (Wiltshire, nos. 1354-1387)

Thus, while the large number of small, plain rings found in at Hindon (Wiltshire) is best interpreted as harness rings, the continental parallels of the decorative

ring-shaped ornaments from Tower Hill (Oxfordshire) strongly suggest that they were not harness rings but bangles or bracelets.

Furthermore, while the rings from Hindon (Wiltshire) showed signs of wear but only little evidence for damage or distortion, only three of the bracelets/ bangles from Tower Hill (Oxfordshire) were complete and undamaged. The others only survive in fragments. Northover's metallurgical analysis of the Tower Hill bronzes shows that most of the objects from the Tower Hill hoard were cast from low tin and low to medium lead bronzes suggesting that they were not made from generally more heavily leaded bronze of the preceding Ewart Park period (Northover 2004, 3-4). This strongly suggests that none of the items in the Tower Hill hoard were cast from Ewart Park scrap, but from melted down Portland or Blandford type axes which had a higher content of tin and lead (Northover 2004). While this may be true for the socketed axes which may have been cast on-site, as the presence of some metalworking residue suggests (Coombs *et al* 2003; Northover 2004), the different metallurgy of the alien-looking ornaments in the Tower Hill hoard may be better explained with a continental origin. It is more likely that they had been brought over from the continent, specifically from the southern area of the Nordic Circle that is southern Denmark or Northern Germany.

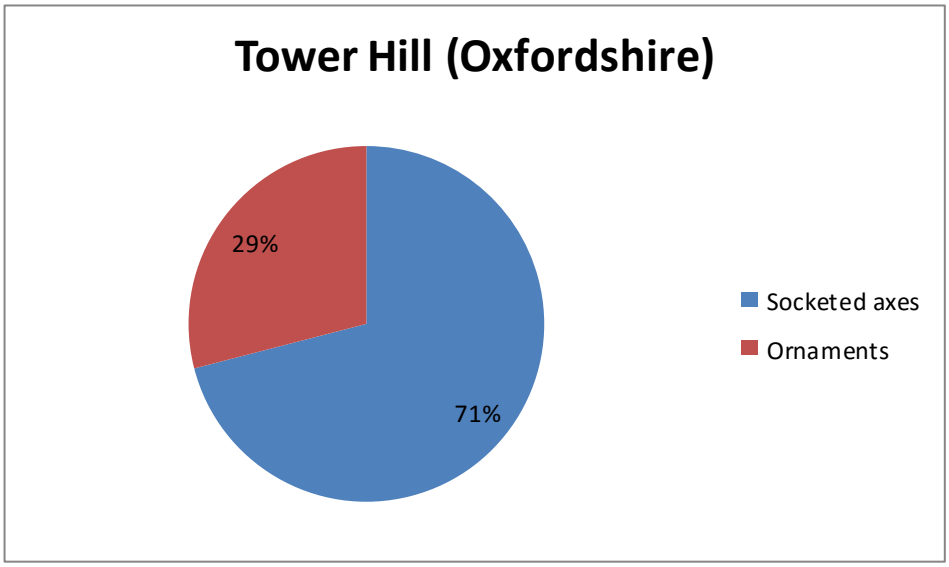


Figure 6.12: Axe-dominated hoard (contents): Tower Hill (Oxfordshire, nos. 932-953)

In addition to their metallurgy, in his analysis of the Tower Hill axes Northover also looked at the wear pattern on the axes' surface, especially around the blade. He concluded that, unlike the high-tin axes of Hindon, Portland and Blandford type that the extent of cold hammering and annealing around their blades, together with the finished structure, makes it more probable that the axes from Tower Hill were designed for use despite the low tin contents of some (Northover 2004, 9). This evidence is best seen of the re-worked, used and re-sharpened axes from the Tower Hill hoard, especially nos. 933-935, 945, 952+953 (Plates 51 and 60).

Figure 6.13: Socketed axe from Bottisham Lode (Cambridgeshire: no. 85): Sompting type, Tower Hill variant with wear and re-sharpening marks

Northover's conclusion that the axes from Tower Hill (all of Sompting type, Tower Hill variant), could have all been finished off and prepared for work is strongly supported by evidence for wear and resharpening on single finds of

axes of Sompting type, Tower Hill variant: unlike axes of Hindon, Portland and Blandford types, all other associated and single finds of Sompting type, Tower Hill variant axes showed clear signs of wear and use, for example the axes from Lode (Cambridgeshire, no. 85, fig. 6.13), Skelmore Heads (Cumbria, nos. 197 and 198), Ulverston (Cumbria, no. 1397) and the Lea Marshes (Essex, no. 666). Thus, even though the hoards from Tower Hill (Oxfordshire) and Hindon (Wiltshire) are similar in character (that is that they are dominated by socketed axes), their contents and the pre-deposition treatment of the individual socketed axes mark them as distinctly different.

In terms of contents it is noteworthy that while none of the axe-dominated hoards from Dorset and Wiltshire contained any continental metalwork, the hoard from Tower Hill (Oxfordshire) did. This inclusion of continental material connects the hoard from Tower Hill to one of the other two axe-dominated hoards from Sussex: the hoard from Sompting (Sussex, nos. 1009-1025; fig. 6.14). Here, socketed axes of all Sompting variants were found in association with transitional socketed axes and East Rudham or linear-decorated axes as well as a large cauldron of Gerloff's Class B2, a fragment of another cauldron and a continental phalera, a *Krempenphalere* (Curwen 1948; O'Connor 1980, 423; Gerloff 2010, 218-20).

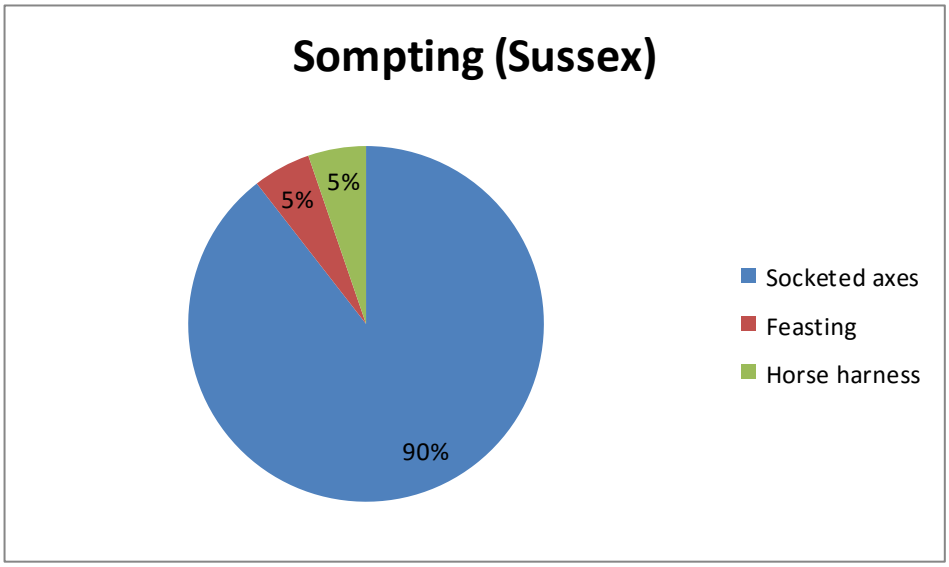


Figure 6.14: Axe-dominated hoard (contents): Sompting (Sussex, nos. 1009-1025)

The second hoard from Sussex (Ferring, nos. 999-1008) does not contain any continental material. Instead, in addition to its number of transitional and Sompting type, Cardiff II variant socketed axes, it included a socketed bronze leather-working knife and two sword fragments which are very uncommon additions to a British Early Iron Age hoard (fig. 6.15+6.16).

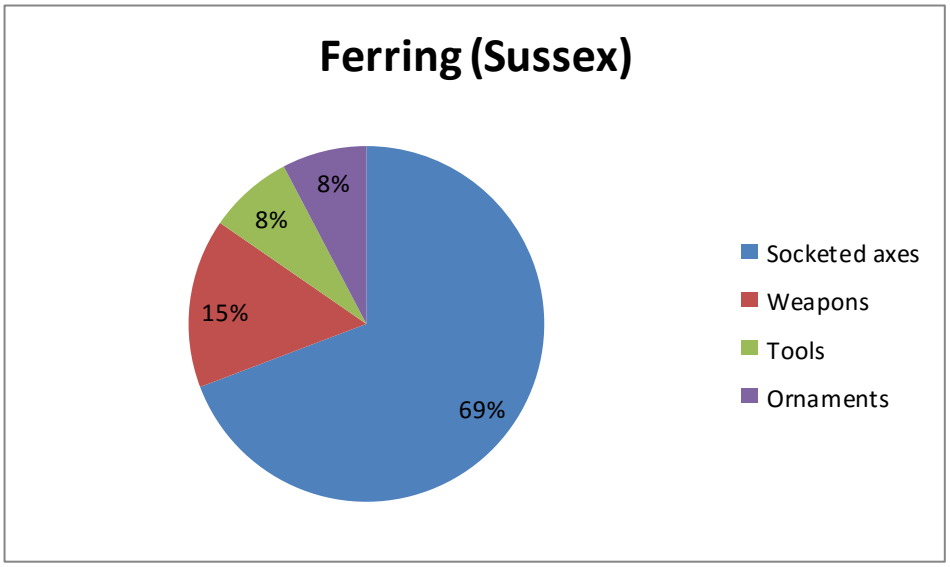


Figure 6.15: Axe-dominated hoard (contents): Ferring (Sussex, nos. 999-1008)

While sword fragments frequently occur in Late Bronze Age scrap hoards of the Ewart Park period, the hoard from Ferring (Sussex) is the only Early Iron Age hoard that includes a bronze sword fragment. The only other association of axes and swords in an Early Iron Age hoard is the association of a hilt of a continental iron sword of Mindelheim type with six transitional and Sompting type (Cardiff II variant) socketed axes in the mixed hoard from Llyn Fawr (Glamorgan, nos. 1294-99; Plate 128).

Looking at the entire corpus of 54 Early Iron Age metalwork hoards and set against the large number of Late Bronze Age hoards that included bronze sword fragments (Burgess and Colquhoun 1988; Turner 2010) it is remarkable that only two Early Iron Age hoards contained one sword fragment each, especially since one of them was made from wrought iron and is of Continental manufacture. The scarcity of swords and sword fragments in Early Iron Age hoards strongly suggests that swords were either deposited in a different way or may have fallen out of fashion like they had done in Central Europe at the time.

In Central Europe, Early Iron Age warrior grave assemblages in Southern Germany and Austria strongly suggest that a combination of dagger and spear were now the preferred weapons (Kossack 1959; Kromer 1959).

Figure 6.16: The Ferring hoard (Sussex, nos. 999-1008), found with a socketed leather-working knife, a belt ornament and two Gündlingen sword fragments (centre) (image courtesy of Worthing Museum)

In British Early Iron Age hoards socketed axes are much more often associated with leather-working knives, spearheads and sickles (both bronze and iron) than swords or fragments thereof. This is true for axe-dominated, mixed and multi-period hoards, for example Llyn Fawr (Glamorgan: iron spearhead, iron sickle and bronze sickles) and Cardiff II (Glamorgan, bronze sickles and bronze leather-working knives) and in the hoards from Hindon (Wiltshire, iron sickle and iron spearheads), the Vale of Wardour (Wiltshire, bronze sickle and spearheads) and Salisbury (Wiltshire, bronze leather-working knives, sickle and spearheads).

In conclusion it can be said that not only do axe dominated hoards occur in a similar geographical area that is in Wessex, the Sussex coast and in Oxfordshire (south of the Thames), they also include artefacts of similar character which may be divided into six distinct groups:

1. Socketed axes
2. Evidence for horse riding (harness rings, phalerae, horse bits, cheek pieces and pole caps)

3. Evidence for eating/feasting (cauldrons)
4. Weapons (mainly spearheads and, very rarely, sword fragments)
5. Tools (especially socketed gouges, socketed leather-working knives and sickles)
6. Ornaments (bangles, bracelets)

Except for the sword blade fragments from Ferring (Sussex) and the broken and curled-up bracelet fragments from Tower Hill (Oxfordshire) it can be concluded that artefacts deposited in axe-dominated hoards are in good if not unused condition. As the name suggests, socketed axes are the dominant artefact type in these hoards, standing out in numbers, type and condition. Most of these hoards contain more than 60% socketed axes – the only exception is the hoards from Hindon (Wiltshire) which, because of the great number of bronze rings, contains only 42% socketed axes. However, some of the rings were found in small clusters suggesting they may have been connected with each other – possibly via leather straps or belts, as the riveted bronze sheets attached to some of the rings suggest. Thus it can be argued that the rings were not individual artefacts in their own right at the time of deposition, but components of a small number of larger objects, such as a harness or a bridle.

The seven Early Iron Age axe-dominated hoards discussed above stand in stark contrast to the two hoards that make up the next category: mixed hoards. While axe-dominated hoards contained almost always more than 60% socketed axes, mixed hoards have very varied contents and normally contain less than 25% socketed axes.

6.2.4. Associations: Mixed and multi-period hoards

Mixed hoards are made up of a much greater variety of artefacts types than axe hoards and axe-dominated hoards: they often include evidence for feasting as well as horse riding, tools, weapons, ornaments and razors. Altogether there are seven mixed hoards, but they fall into three different categories: mixed hoards, multi-period hoards and one fragmented hoard. The fragmented hoard (Kings Weston Down, Bristol, nos. 54-73) needs to be looked separately because it contains only one complete artefact – a socketed axe – while all the

other objects are bronze axe and other tool fragments, casting jets and other small remains of casting residue.

Amongst the remaining six mixed assemblages are four which contain material dating from earlier prehistoric periods that is the Early, Middle and/or Late Bronze Age. In one instance, one hoard also contained artefacts dating from the Later Iron Age (Salisbury, Wiltshire, nos. 1061-1202). Even though these hoards are mixed hoards, they should be defined more accurately as multi-period hoards. They stand out not only because of the individual artefacts' earlier date but also because they tend to contain more artefacts and artefact types than simple mixed hoards.

6.2.4.1 Associations: Mixed hoards

There are only two mixed hoards and they both come from the Vale of Glamorgan in South Wales (Cardiff II, nos. 1292+1293, and Llyn Fawr, nos. 1294-1299, figs. 6.17 and 6.18). Cardiff II is a hoard of eleven artefacts containing only one complete axe (no. 1292) and one axe fragment (no. 1293), both of which are socketed axes of Sompting type, Cardiff II variant. The Llyn Fawr hoard, on the other hand, is composed of 26 artefacts with only six socketed axes (nos. 1294-1299). Five of them are Transitional types (nos. 1295-1299) and one socketed axe is of Sompting type, Cardiff II variant (no. 1294).

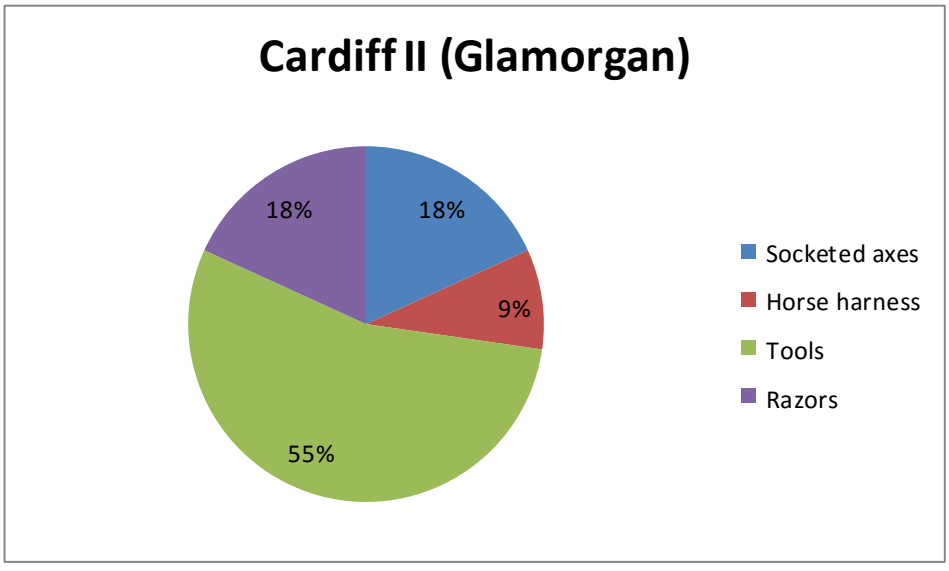


Figure 6.17: Mixed hoard (contents): Cardiff II (Glamorgan, nos. 1292-93)

In the hoard from Cardiff, the complete socketed axe and the axe fragment are associated with four leather working knives, one socketed sickle, a sickle blade fragment, a pole cap and two razors (fig. 6.17.; Plates 119-122). There are no weapons or feasting equipment in this hoard; it also lacks ornaments or decorative fittings of any kind.

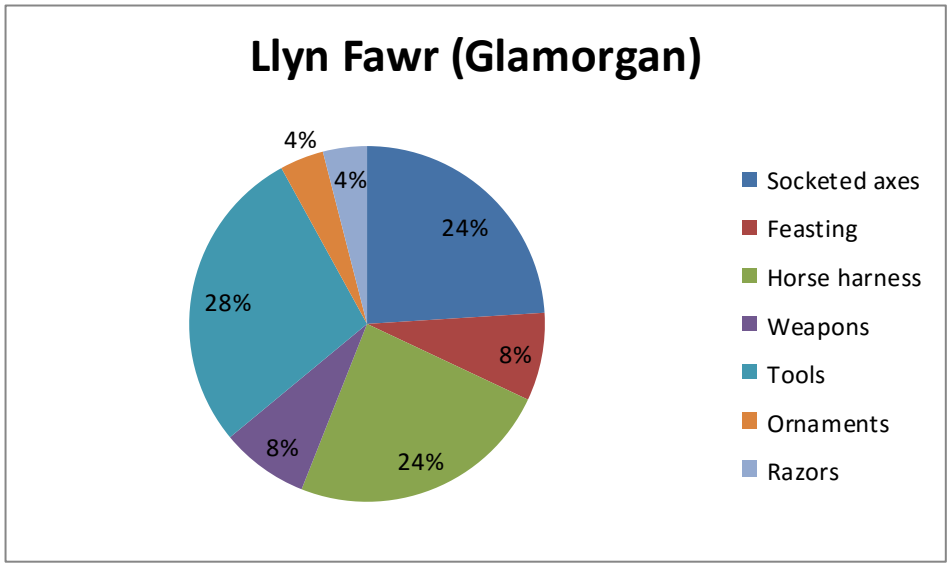


Figure 6.18: Mixed hoard (contents): Llyn Fawr (Glamorgan, nos. 1294-99)

However, it contains an unusually large number of tools that is socketed leather-working knives and sickles, the latter of which can also be found among the assemblage from Llyn Fawr (Glamorgan, nos. 1294-1299, fig. 6.18+6.19).

Unlike the axe hoards and axe-dominated hoards discussed above and the other mixed hoard from Glamorgan (Cardiff II, nos. 1292-1293), the hoard from Llyn Fawr has more typological variety in its contents (fig. 6.18). Tools in general appear to outnumber socketed axes, but it needs to be clarified that while socketed axes stand alone as one artefact type, the seven items grouped under the heading ‘tools’ are three different object types: three socketed gouges, one socketed chisel and three socketed sickles (fig. 6.19). This means that seen as just one artefact class socketed axes still outnumber the other objects.

Geographically, the two mixed hoards come from a small enclosed area of Wales: the Vale of Glamorgan. There are no other Early Iron Age hoards nearby, but two significant Early Iron Age sites in the Vale of Glamorgan add to the overall significance of the area. At Penllyn Moor, three socketed iron axes were

discovered in an area of single Bronze Age metalwork depositions, but there are no finds of contemporary Early Iron Age bronze metalwork (nos. 1328-1330; Plate 131). At the feasting and midden site of Llanmaes on the other hand, different types of socketed axes were found in association with remains of Early Iron Age cauldrons and fragments of other, smaller contemporary vessels as well as dress ornaments/pins (nos. 1405-1407; Plates 150-152). The site at Llanmaes was extensively excavated and analyses of the finds suggest that it was an Early Iron Age midden site, similar to the middens at Broom (Warwickshire), East Chisenbury and Potterne (Wiltshire) (Brown *et al* 1994, 46-9; Lawson 1999; Watson 1999). Excavations at Llanmaes revealed fragments of cauldrons, cups and ladles which were found in close association with swan's neck pins and a small number of socketed axes and fragments thereof which had been deposited amongst the animal remains and other bronze debris (Plates 150-152; Lodwick and Gwilt 2004; Lodwick and Gwilt 2009).

Figure 6.19: The two bronze and one wrought iron sickle from the Llyn Fawr hoard (Glamorgan, found with socketed axes nos. 1294-1299)

Llanmaes is unique in its large number of Early Iron Age vessel fragments, suggesting that an unusually wide range of differently-sized cups, ladles and cauldrons were used on-site for the preparation and consumption of food. The

hoard discovered in Llyn Fawr included two large complete cauldrons, but the hoard did not contain any smaller vessels such as ladles or cups. It did, however, contain several tools, personal items and items of horse harness such as socketed gouges, razors and cheek pieces which find no parallel in the assemblage recovered from Llanmaes (fig. 6.20+6.21; Plates 123-130, Gwilt and Lodwick 2009, 29-30). This inconsistency in artefact types recovered from Llyn Fawr and Llanmaes strongly suggests that each of these two contemporary Early Iron Age sites had a different purpose and was very probably visited and used for a different reason. Being located in such a small geographical area it is unlikely that both places were visited independently by different groups of people who were not aware of each other's existence. Furthermore, while Llanmaes is located in the valley near the sea, Llyn Fawr is a mountain lake on the side of a mountain with a spectacular view across the valley: however, its location and depth makes artefacts deposited in Llyn Fawr nearly impossible to retrieve, while the artefacts that were lost/deposited at Llanmaes could have been found and picked up again at a later visit.

Figure 6.20: Socketed axe of Sompting type, Tower Hill variant from Llanmaes (Glamorgan, no. 1405)

The other important difference between the site assemblage of Llanmaes and the hoard contents of Cardiff II and Llyn Fawr is that the two hoards contained items of horse harness and cart fittings but there were none found at the sites in the valley. Items of horse harness and cart fittings are generally very rare in British Early Iron Age hoards. They only occur alongside Early Iron Age socketed axes in the two mixed hoards from South Wales and in the above-mentioned axe-dominated hoard from Sompting (Sussex) where 17 socketed axes were

associated with a continental phalera and a Class B2 cauldron (Curwen 1948; O'Connor 1980, 423, no. 223 and 585, List 227, no. 28; Gerloff 2012, 218-220). Even though we know of only eleven Early Iron Age phalerae from Britain, they are probably the most common item of Early Iron Age horse gear found in Britain. Seven phalerae come from Early Iron Age hoards (Llyn Fawr, Glamorgan: 3 phalerae, Plate 129; Melksham, Wiltshire: 3 phalerae; Sompting, Sussex: 1 phalera, Plate 77) and four were single finds dredged from the Thames in London (O'Connor 1975, 215-226). Except for the phalera from Sompting, all of them belong to von Merhart's group of Central European *Krempenbuckel-* or *Krempenphaleren*, a type of phalera that was also recurrent in graves at the Early Iron Age cemetery of Court-St-Étienne (Brabant, Belgium) (von Merhart 1956, 29+84-85; Kossack 1956, Tafel 13; Mariën 1958, nos. 117-118b, 127+152; 39-40, fig. 4; 63-64, fig. 9; 146-7, fig. 25; all stray finds; O'Connor 1975, 221; Gerloff 2010, 228).

Figure 6.21: Armorican axe from Llanmaes (Glamorgan, no. 1406)

The reference to the Belgian cemetery of Court-St-Étienne is significant because it does not only provide convincing parallels for most of the British phalerae; it also provides the only parallels for the cheek pieces and the yoke mount that were part of the Llyn Fawr assemblage (figs. 2.14+2.15). The pair of copper-alloy cheek pieces from Llyn Fawr is the only pair known from Britain and while there are no useful British parallels, there are three corresponding cheek pieces from the cremation cemetery at Court-St-Étienne (Brabant, Bel-

gium) (Mariën 1958, 24-25, 84 and 247). One pair was found in Tombelle A and another single cheek piece in Tombelle Z (Mariën 1958, figs. 3 and 12; Fig. 40+42). While the sole example from Tombelle Z was only associated with an urn and a few fragments of bones and quartz, the pair of cheek pieces from Tombelle A was found with remains of an iron sword and a yoke mount very similar to the one from Llyn Fawr (Mariën 1958, 24).

Figure 6.22: 'Yoke mount' from Tombelle A, Court-St-Étienne (Brabant, Belgium)

The lack of direct British parallels for the two copper-alloy cheek pieces from Llyn Fawr strongly suggests that bronze cheek pieces were not in common use in Britain during the Early Iron Age (Plate 127). Instead, it is more likely that antler or bone cheek pieces were in use throughout. A pair of antler cheek pieces was discovered together with bronze nave rings and other Late Bronze Age cart fittings in the Heathery Burn Cave (County Durham) and other examples of cheek pieces made from organic materials come from near settlement sites which have produced Early Iron Age metalwork, for example Ham Hill (Somerset), Potterne (Wiltshire), Bledlow (Buckinghamshire) and Washingborough (Lincolnshire) (Roes 1960, 68; Britnell 1976, 25, fig. 1; Coles et al. 1979, 5-11; Lawson 2000).

There are only two 'yoke mounts' known from the British Isles: the complete example from Llyn Fawr (Glamorgan; fig. 6.23; Plate 128) and one possible yoke mount fragment

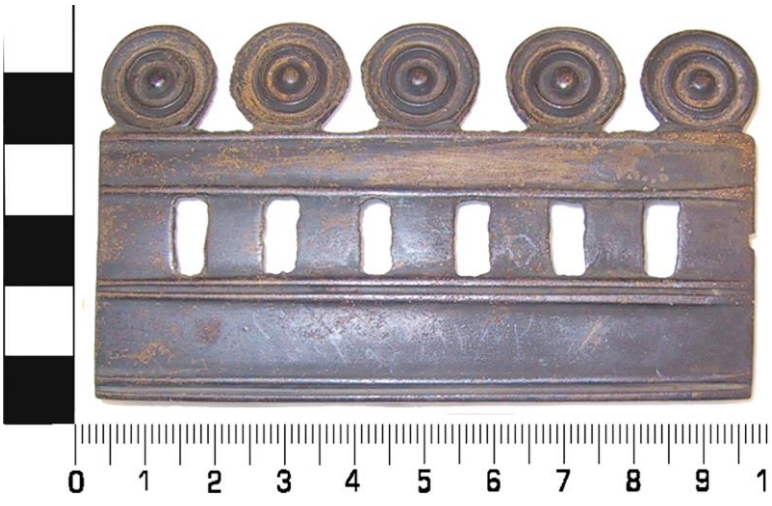


Figure 6.23: 'Yoke mount' from Llyn Fawr (Glamorgan, found with axes nos. 1294-1299)

from the Early Iron Age settlement at Staple Howe (Yorkshire) which also produced an Early Iron Age razor (Brewster 1963, 111). While the small cup-shaped fragments from Staple Howe are difficult to identify and may possibly have belonged to a yoke mount of Central European type, the yoke mount from Llyn Fawr finds its closest parallel in a yoke mount from Tombelle A at Court-St-Étienne (Brabant, Belgium, fig. 6.22), the very same grave which also produced two of the three cheek pieces discussed above (Mariën 1958, fig. 3; Meyer 1984/85, 74-75).

Figure 6.24: Grave assemblage from Tombelle 3, Court-St-Étienne (Brabant, Belgium): iron horse bit, spearhead, antenna-hilted dagger and flesh hook and a socketed axe related to Transitional and Linear-Decorated types

The horse trappings and yoke mount from Llyn Fawr imply an unusually strong connection between the Vale of Glamorgan and the Continent, especially Belgium. This connection is also supported by two of the three iron artefacts that were found with the bronzes at Llyn Fawr: the iron sword which is an iron version of the Continental Mindelheim type and the iron spearhead (Fox and Hyde 1939, 374). They both look exotic amongst the corpus of British Late Bronze and Early Iron Age swords and spearheads: they are unique in Britain and there are no British parallels for either of them. Like the horse trappings, these two artefacts have the best parallels on the Continent. While the iron Mindelheim

type sword is best compared to examples from Neuensee (Germany; Schauer 1971, no. 610), Kemmathen (Germany; Schauer 1971, no. 607) and three swords from the Hallstatt cemetery (Austria; Schauer 1971, nos. 604-606), the iron spearhead closely matches the iron spearhead from Tumulus 3 at Court-St-Étienne (Brabant, Belgium, fig. 6.24) and the hoard from Alsenborn (Rheinland-Pfalz, Germany) (Mariën 1958, fig. 18, no. 209; Cowen 1967, fig. 6, 4). Interestingly, both contexts also included socketed looped axes and iron flesh-hooks of very similar types, which confirm the Early Iron Age date for the Llyn Fawr find.

The assemblages of both hoards are closely linked through their socketed axes which are related to our Transitional and Linear-decorated types, as well as razors, socketed sickles, items of horse harness and wagon fittings which are uncommon elsewhere in British Early Iron Age hoards.

The evidence from the two hoards and the sites at Llanmaes and Penllyn Moor strongly suggests that the Vale of Glamorgan was an innovative place in the Early Iron Age with strong connections to the Netherlands and Belgium. The unusually large number of early wrought iron artefacts that were concentrated in this small region shows that its people accepted and used the new metal to their advantage, as evidenced in the imported iron Mindelheim type sword, the iron spearhead and a local iron copy of a bronze socketed sickle found at Llyn Fawr (Plates 126-128).

The unique yoke mount and cheek pieces as well as the continental phalerae that were part of the Llyn Fawr assemblage suggest a very strong link between the Vale of Glamorgan and the Brabant region in Belgium. However, the harness fittings had not been imported like the iron Mindelheim type sword but were probably of local manufacture.

6.2.4.2 Associations: Multi-period hoards

Amongst the 54 Early Iron Age hoards including socketed axes are only four multi-period hoards: the hoards from Danebury (Hampshire, nos. 686-689, fig. 6.25) Salisbury, Wardour, (Wiltshire, nos. 1061-1202 and 1388-1392, fig. 6.29) and Poolewe (Ross & Cromarty, nos. 1275-1279, fig. 6.26). It is important to recognise that there is no overlap between multi-period hoards and axe hoards (see below), even though the hoard from Salisbury (Wiltshire, nos. 1061-1202)

comes close to representing both because it incorporates both a large number of socketed axes and artefacts dating from the Early, Middle and Late Bronze Age as well as the Early and Middle Iron Age. Nevertheless, the composition of the hoard strongly suggests that as with some of the mixed hoards, the multi-period aspect of Salisbury over-rides the fact that the majority of Early Iron Age artefacts in the hoard are socketed axes. Out of 535 artefacts 160 were socket-

Figure 6.25: The Danebury hoard (Hampshire, nos. 686-689): a multi-period hoard

ed axes, 141 of which were Early Iron Age Portland type axes (Stead 1998,

113). However, the Salisbury hoard was deposited in the 2nd century BC and not in the 8th or 7th century, like the other multi-period hoards. This later date of deposition makes it part of the next stage of Iron Age hoarding, which Gosden suggested commenced in c. 400BC (Gosden 2012, 132-133). However, its extre mely similar composition of artefacts which can be dated to the Early, Middle and Later Bronze Age as well as the Early and Middle Iron Age strongly suggests that the Salisbury hoard was deposited with the earlier hoards known or still very much in the mind of the local people. Stead and Hingley both argue that the composition of artefacts in the Salisbury hoard suggests that the older artefacts had been found and curated by local people before their final deposition in the Later Iron Age (Stead 1998, 123; Hingley 2009, 146). With the hoards from Wardour and Danebury found in the same region, we can take Stead's and Hingley's ideas further and argue that a hoard similar to Wardour and Danebury was discovered by people of the late 3rd or early 2nd century and seemingly understood as a collection of curated artefacts spanning a certain length of time. Contemporary artefacts of 2nd century date, like the miniature shields and cauldrons, were added to the contents of the hoard before re-deposition (Stead 1998, 110). The subsequent excavation of the findspot near Salisbury strongly suggests that the hoard was deposited in a pit which was cut into an existing pit which had been of a local set-

Figure 6.26: The Poolewe hoard (Ross & Cromarty, nos. 1275-1279): multi-period hoard

Figure 6.27: Part of the Salisbury hoard (Wiltshire, nos. 1061-1202): multi-period hoard: axes nos. 1062+1063 with Late Bronze Age material

tlement dating from around 700-100BC. Stead argued that the original pit had been used as granary store previously but now also contained pottery and animal bones (Stead 1998, 111). Another, much smaller yet contemporary Later Iron Age hoard, Netherhampton B, was found nearby, in a similar pit suggesting that the hoarding of bronze metalwork was still practiced in this settlement in the Later Iron Age (Stead 1998, 110-111). Re-deposition in pits previously used as granaries is a feature that the two assemblages from Salisbury share with the group of hoards from Langton Matravers (nos. 226-598) which were also discovered in pits formerly used for grain-storage (Roberts *et al* 2015).

Even though there are other multi-period hoards, like the hoards from Danebury (Hampshire, fig. 6.25) and Wardour (Wiltshire), the Salisbury hoard stands out, and not only because of the addition of later material and the later date of re-deposition. The addition of a large number of Portland type axes which are not

normally found in association with any other metalwork as well as a single axe of Sompting type, Figheldean Down variant, suggests that the Salisbury hoard was deposited by people who had collected artefacts not only from their own region but also the nearby county of Dorset. All other hoards containing Portland type axes, such as the hoards from Eggardon Hill (nos. 219-225), Langton Matravers (nos. 226-598) and Portland (nos. 599-609) contain only Portland type axes and are restricted to findspots within the modern county of Dorset. No other hoards containing solely Portland type axes were discovered in neighbouring counties like Wiltshire, Somerset and Hampshire. In terms of Early Iron Age hoards and their distribution and contents, the addition of such a large number of Portland type axes to the Salisbury hoard seems thus out of place and alien, similar to the Later Iron Age addition of the miniature shields with La Tène decoration. Another alien addition to the Salisbury hoard is the single Sompting axe, Figheldean Down variant (no. 1096) which had been made in the same mould or copied from the same mould template as axes nos. 1033-1036 from the Figheldean Down hoard (Wiltshire, nos. 1029-1050) and the single find from Stockbridge (Hampshire, no. 1394) (fig. 6.28, Plates 80+144). Single finds of Figheldean Down variant axes are extremely rare; there are only four single finds known so far: two finds from London (Old Kent Rd, no. 669, and Kingston-upon-Thames, no. 992, Plate 31+71), the above-mentioned find from Stockbridge, Hampshire (no. 1394) and an axe which may have come from the settlement site at Ham Hill, Somerset (no. 965), and there are only two hoards of just over 30 axes each (Figheldean Down, Wiltshire, nos. 1029-1050, and Mylor, Cornwall, nos. 147-179). Both the hoards from Figheldean Down and Mylor were, like the majority of other Early Iron Age hoards pure axe hoards, and with single finds being so rare, the addition of one single Figheldean Down axe to the Salisbury hoard is remarkable and needs to be investigated further. Hingley argues that multi-period hoards like the assemblage from Salisbury strongly suggest that Iron Age people must have felt enabled to define some artefacts as ancient and that these alien and ancient artefacts must have had some agency because they influenced the actions and reactions of people who (re-)deposited them after discovery (Hingley 2009, 144). This in turn suggests that even though Bronze Age and Earlier Iron Age artefacts may have appeared strange

to Middle Iron Age people, these bronze objects were still recognisable to them in terms of their contemporary culture: they were made from a metal which was still in use and the general shape of axes – even though cast copper socketed axes went out of fashion after the Early Iron Age – had not changed much (Hingley 2009, 145). The idea of earlier prehistoric artefacts reused in a later prehistoric context raises a number of interesting questions which have not yet been explored in greater detail: what did prehistoric people make of their history and prehistory? How did they understand artefacts that were left behind by earlier prehistoric peoples? Not having any written accounts from Iron Age Britain, the material culture that was left behind is one important aspect we can look at in search for an answer. The fact that we find multi-period hoards such as the hoards from Danebury, Wardour and Salisbury strongly suggests that the meaning of the earlier prehistoric artefacts outweighed their value in scrap metal: the Iron Age people who deposited the Salisbury hoard had obviously not reused the Portland axes or the Figheldean Down axe – or any of the even older Earlier and Middle Bronze Age metalwork – for the casting of their own items of metalwork. They did not see the artefacts as a source of recyclable material to be used for the casting of their own bronzes, but as artefacts that needed to

Figure 6.28: Five axes of Sompting type, Figheldean Down variant from Salisbury (Wiltshire: centre, no. 1096) and Figheldean Down (Wiltshire, nos. 1033-1036)

be either curated or reburied or both. It has been suggested that objects can be used for various things throughout their lives – and there is no reason why artefacts that were deposited by one person and dug up again but another, could not be resurrected to be used for or turn into something completely different (Joy 2012, 543). There is no reason why, in fact, an object could not live through two or more processes of use, storage, transport, maintenance and discard if it was rediscovered after initial deposition (Schiffer 1972, 157-60; Joy 2012, 542). If we take into account the act of recycling – which did not happen in the case of the Early Iron Age bronzes from Wardour, Danebury and Salisbury because they were found as deposited, objects could even live through procurement and manufacture more times than just one. This idea that objects (very much like people) have biographies and that they rest very much at the heart of their own life-stories is not a new idea, but it has never been applied to Early Iron Age metalwork hoards (Kopytoff 1986; Gosden and Marshall 1999; Fontijn 2002; Joy 2009). These object biographies as suggested originally by Kopytoff and more recently by Gosden and Marshall are very relevant to Early Iron Age metalwork, especially metalwork found in multi-period hoards. Both Bradley and Joy suggested that even though a use-wear analysis is important to determine the duration, type and intensity of usage as well as the object's initial function, objects cannot and must not be reduced to this single aspect of their lives: in addition to their use-life, there would have also been a cultural and social significance that must not be separated from the object's technological and functional properties (Bradley 1998, xxx; Joy 2009, 541-543). Use-wear analysis of Early Iron Age socketed axes in our multi-period hoards tells us that very few of them were used and re-sharpened (e.g. no. 1390 from Wardour, Wiltshire; nos. 686-687 from Danebury, Hampshire) and that the majority of Portland and Blandford axes from both the Salisbury and Wardour hoards had been left in their initial as-cast condition even though they may have already been deposited and rediscovered at least once before their secondary – or rather, final, – deposition. However, use-wear analyses can rarely tell us how else artefacts could have changed in their function. It has been suggested that objects can also change through performance and social interactions which they play a part in and although we do not know what the initial or secondary deposi-

tion of the socketed axes in our multi-period hoards looked like, contemporary or – in case of the Salisbury hoard – preceding cases of hoard deposition with similar artefacts may help us see a glimpse of what their initial deposition looked like (Gosden and Marshall 1999, 169-170; Joy 2009, 541).

Figure 6.29: The Vale of Wardour hoard (Wiltshire, nos. 1388-1392): a multi-period assemblage

If, for the Portland type axes and the single Figheldean Down type axe, their deposition at Salisbury was their secondary deposition, as suggested above, it is likely that their primary deposition looked like that of other Portland and Figheldean Down axes, that is a deposition in hoards accompanied by nothing but other Portland or Figheldean Down axes. This would have been very different from their deposition in a multi-period hoard and having been deposited by different people at a different time, it is more than likely that different motives may have been behind the two individual depositions. Gosden suggested that a single axe (or any other object for that matter) was able to represent the condensation of relations of people and practices that had ever connected with this axe, which means that within itself the axe could hold everything that contribut-

ed to its final deposition, including the mining, smelting and casting of the axe, the polishing and finish, use, possible exchange, loss and rediscovery – everything that happened until its final deposition (Gosden 2012, 127-128). Taking Gosden's argument a step further this would by his definition also include multiple depositions that happened at different points in time. Many of these aspects would be very difficult to prove using solely use-wear analysis but including an axe type's typical mode of deposition may bring us a step further towards an individual axe biography. For example, the two Portland type axes nos. 600 (Portland hoard, Dorset) and 1073 (Salisbury hoard, Wiltshire) both displayed a number of fine parallel striations along the fairly sharp cutting edges which strongly suggests that someone attempted to resharpen them it in more recent times.

6.2.5. Associations: Fragmentary hoards

There is only one fragmentary hoard amongst the corpus of Early Iron Age hoards: the assemblage from King's Weston Down, Bristol (nos. 54-73, fig. 6.30; Grinsell 1986, 31, 35, Pl. 3.9; Locock 2001, fig.11.5). Compared with all the other Early Iron Age hoards this hoard is very unusual in character and composition. It is very uncommon to find extremely worn and broken-up artefacts and fragmented objects in Early Iron Age hoards. Most of the older, worn implements discovered in multi-period hoards can be more plausibly interpreted as heirlooms or mementos included in Early Iron Age hoards such as the hoard from Poolewe (Ross and Cromarty, nos. 1275-1279) or Danebury (Hampshire, nos. 686-689). These artefacts seem to have been included in these hoards because of their age or significance rather than their face value as recyclable bronze.

Generally, the inclusion of fragments and worn-out and broken tools in bronze metalwork hoards is much more characteristic for Late Bronze Age hoards from Kent and East Anglia (Pendleton 1999; Turner 2010, 67f.). There are numerous fragments of socketed axes (but no fragments of other object types) in Portland and East Rudham type axe hoards such as the hoards from Langton Matravers (Dorset, nos. 226-598) and East Rudham (Norfolk, nos. 845-886), but these hoards do not include any worn-out objects or fragments thereof. Objects in

these hoards may have reached the end of their usefulness and life, but none of them showed any wear in the traditional sense, that is re-sharpening marks or nicks and dents along the cutting edge (Roberts and Ottaway 2003). The hoard from Kings Weston Down, on the other hand, included a very small number of used tools and fragments only: one complete rib-and-pellet decorated axe and one large fragment of another, sixteen socketed axe fragments, two socket fragments, three casting jets, one socketed sickle fragment, and several fragments of sheet metals from cauldrons as well as fragments of casting waste (Plate 1; Gerloff 2010, no. 55). This degree of object fragmentation cannot be

Figure 6.30: The Kings Weston Down hoard (Bristol, nos. 1-52): a fragmentary hoard

paralleled in any other Early Iron Age hoards.

In addition to its unusual composition, the Kings Weston Down hoard also stands out because of its unusual findspot. The hoard was found south of the

Bristol Channel, a geographical region that is void of Late Bronze Age hoards, which in turn raises the question in how far it can be interpreted as a 'scrap metal hoard' similar to the Late Bronze Age scrap metal hoards from East Anglia and Kent. Early Iron Age assemblages from the Bristol, West Midlands and South Wales areas, such as from Broom, Warwickshire, and Llanmaes, Glamorgan (nos. 1405-1407) have been interpreted quite differently (as pyre or feasting sites) and it is possible that the assemblage from Kings Weston Down was not a metalwork hoard in the traditional sense either (Watson 1999; Lodwick and Gwilt 2004, 77-81; Gerloff 2010, 168-169, no. 55). The site at Kings Weston Down was excavated by Tratman in the 1920s, but has not been published in detail, except for a small number of reports on the ongoing excavations of Kings Weston Down Camp and the surrounding tumuli (Tratman 1922-23, 76-83; Tratman 1925, 238-244; Gerloff 2010, 158). The Early Iron Age metalwork assemblage was discovered close to the outer rampart of Kings Weston Down Camp, possibly in association with Late Bronze Age or Early Iron Age burials but no further details about the exact findspot were published at the time (Tratman 1922-23, 76-83; Tratman 1925, 238-244; Gerloff 2010, 158, no. 45). If associated with the tumuli, it would seem that the association was indirect rather than direct, which means that rather than being interpreted as grave goods (which would be highly unlikely) the metalwork may have played part in or bore witness to events that were connected to the tumuli but happened much later than their initial construction. Early Iron Age metalwork deposition in the immediate vicinity of Neolithic or earlier Bronze Age sites is not unusual and comparative evidence for events such as this comes from several sites in Britain where Early Iron Age assemblages were deposited close to or directly at known prehistoric sites, such as Sompting (Lancing Ring, Sussex, nos. 1009-1025), Figheldean Down (tumuli/earthworks, Wiltshire, nos. 1030-1050), Ulverston and Skelmore Heads (Skelmore Heads hillfort, Cumbria, nos. 193-198 and 1395-1397) and Tillicoultry (Cuninghar, Clackmannanshire, nos. 1254-1255) (O'Connor 2007b).

The assemblage from Kings Weston Down has traditionally been described as a hoard of scrap metal but its findspot and composition of mainly axes and vessel fragments which is readily comparable to the composition of the assemblag-

es from Broom (Warwickshire) and Llanmaes (Glamorgan, nos. 1405-1407) and possibly even East Chisenbury or Potterne (Wiltshire), strongly suggests that the Early Iron Age metalwork discovered at Kings Weston Down was connected to feasting or the built-up of a midden at the site rather than the earlier Bronze Age tumuli (McOmish 1996; Watson 1999; Lawson and Allen 2000, Lodwick and Gwilt 2004; Lodwick and Gwilt 2009). Furthermore, the findspot location of the assemblage from Kings Weston Down can be compared to the findspot of the multi-period hoard from Danebury (Hampshire, nos. 686-689) which was also discovered just outside the rampart of a hillfort whose initial phase dates from the Bronze Age-Iron Age transition (Cunliffe and O'Connor 1979, 235-7). This would mean that, rather than interpreting the assemblage from Kings West Down hoard as a scrap metal hoard related to scrap metal hoards of the Late Bronze Age, it should be considered as part of the group of metalwork assemblages from Earlier Iron Age midden or pyre sites such as Llanmaes (Glamorgan) and Broom (Warwickshire). However, in addition to these similarities in character with assemblages from contemporary midden or pyre sites, it may have also displayed a connection between local Early Iron Age people in the Bristol region and past events by having been deposited close to ancient monuments.

6.3. Associations: Discussion

The 54 Early Iron Age hoards containing socketed axes can be divided into five distinct groups: multi-period hoards, mixed hoards, fragmented hoards, axe-dominated hoards and pure axe hoards (fig. 6.31+6.32). There are four multi-period hoards (Danebury, Hampshire, nos. 686-689; Salisbury and Wardour, Wiltshire, nos. 1061-1202 and 1388-1392, and Poolewe, Ross & Cromarty, nos. 1275-1279), two mixed hoards (Cardiff II and Llyn Fawr, Glamorgan, nos. 1292-1293 and nos. 1294-1299), one fragmented hoard (King's Weston Down, Bristol, nos. 54-73), seven axe-dominated hoards and 39 axe hoards (fig. 6.13.). The assemblage from 'South-West England' (nos. 1336ff.) appears to be either a fragmented, mixed or multi-period hoard and its composition is similar to the hoards from Kings West Down (Bristol, nos. 54-73) and Salisbury (Wiltshire, nos. 1061-1202) (MacGregor 1987, 19, Group 3, Plate 11; Stead 1998).

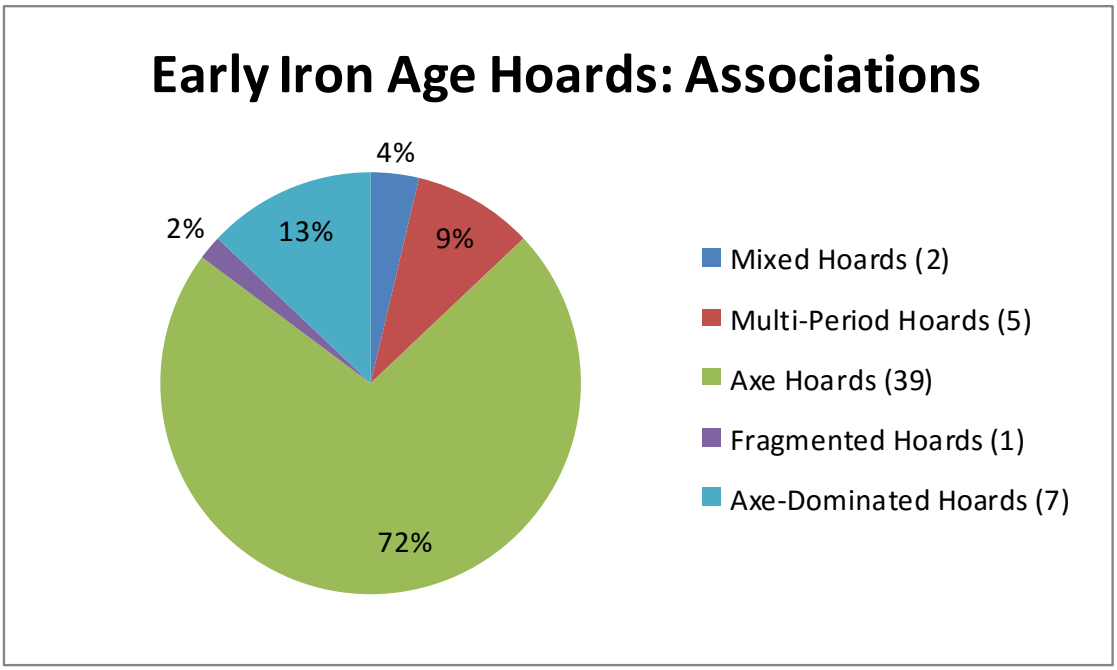


Figure 6.31: Early Iron Age Hoard types

As with most artificial groupings, the boundaries between some of the hoard categories are not clear-cut. For example, by definition, a multi-period or fragmentary hoard would also be a mixed hoard because like mixed hoards, they also consist of objects of more than one artefact type. However, what sets the four multi-period hoards apart from other mixed and fragmentary hoards is the fact that multi-period hoards include older, possibly curated artefacts which already had some age at the time of deposition. Early Iron Age mixed hoards are composed of mostly complete and seldom fragmentary contemporary artefacts such as the razors, cart or wagon accessories, tools and cauldrons from Cardiff II and Llyn Fawr (Glamorgan, nos. 1292-93 and nos. 1294-99).

The distribution map of the five hoard types shows that the northern part of the Wessex region, especially the counties of Hampshire and Wiltshire, was the only region where different types of hoard composition overlap (fig. 6.14). Other areas, such as Cornwall, Dorset and East Anglia are much more homogenous in deposition of certain hoard types: here, only axe hoards were deposited. Mixed hoards, multi-period hoards, fragmented hoards and even axe-dominated hoards are absent.

It is also noticeable that the only two mixed hoards were found in South Wales (Cardiff II, nos. 1292-1293 and Llyn Fawr, nos. 1294-1299), while there is an obvious cluster of multi-period hoards in the area between Salisbury and Tisbury, that is the valley of the River Nadder and further to the east of Salisbury, just outside of the large hillfort of Danebury in Hampshire (Salisbury, nos. 1061-1202; Vale of Wardour, nos. 1388-1392; Danebury, nos. 686-689).

The only notable exception is the single multi-period hoard from Poolewe (Ross and Cromarty, nos. 1275-1279) which is the northernmost Early Iron Age metalwork hoard in Britain and stands on its own, without any other similar metalwork hoards discovered in the near vicinity.

Unlike mixed and multi-period hoards, the term axe hoard describes a hoard which is solely composed of socketed axes. Pure axe hoards are, for example, all Armorican type axe hoards like the hoard from Ventnor (Isle of White, nos. 776-805), all East Rudham type axe hoards like the hoard from East Rudham (Norfolk, nos. 845-886), most Portland type axe hoards, such as the hoards from Langton Matravers (Dorset, nos. 226-598) and Portland (Dorset, nos. 599-609) and most Sompting type axe hoards like the hoards from Figheldean Down (Wiltshire, nos. 1030-1050) and Skelmore Heads (Cumbria, nos. 193-198). These hoards include just axes except for a probably casting jet from Skelmore Heads and a possible razor fragment from Figheldean Down. Axe hoards that are composed of East Rudham type axes, Portland type axes and axes of Sompting type, Figheldean Down and Cardiff II variants do not include axes of any other axes types whilst axes of Sompting type, Kingston and Tower Hill variants occur with axes of other types, for example in the hoard from Sompting (Sussex, nos. 1009-1025) where axes of Tower Hill and Kingston variants are associated with transitional axes, axes of Sompting type, Figheldean Down and Cardiff II variants as well as linear-decorated or East Rudham type axes. However, this is the only hoard with axes of more than two axe types found in association.

There are a small number of six Early Iron Age hoards that are best described as ‘axe-dominated hoards’. ‘Axe-dominated hoards’ are hoards which contain artefacts other than socketed axes, such as cauldrons, sword fragments, tools, ornaments and items of horse harness or carts. These are the hoards from

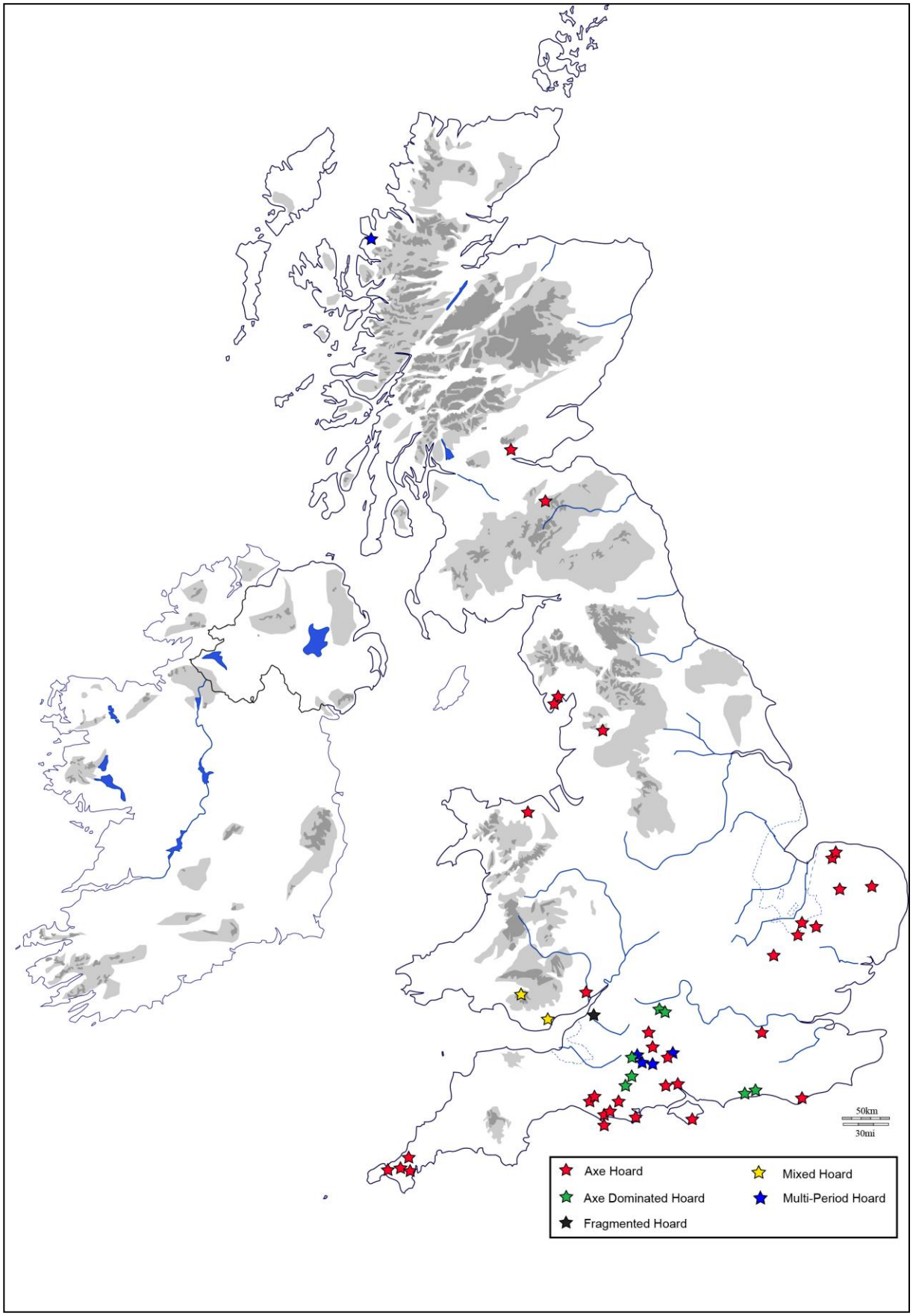


Figure 6.32: Map of Hoard Types

Sompting (West Sussex, nos. 1009-1025), Ferring (West Sussex, nos. 998-1008), Thorney Down (Dorset, nos. 610-617), Blandford (Dorset, no. 211), Tower Hill (Oxfordshire, nos. 932-953) and Hindon (Wiltshire, nos. 1354-1387). In these hoards socketed axes still outnumber the other artefact types while in mixed hoards, axes are not the dominant artefact.

The only Early Iron Age hoard which retains the 'fragmentary' character of its Late Bronze Age predecessors is the hoard from Kings Weston Down (Bristol, nos. 54-73; Gerloff 2010, 153).

6.4. Associations: Early Iron Age hoards without socketed axes

Presently, we recognise only two Early Iron Age hoards that do not contain any socketed axes: the assemblages from Melksham (Wiltshire) and the recent discovery from Stockbury (Kent) (Gingell 1979, 245-251; KENT-CD6A33 and KENT-9A4681, Treasure Case Tracking No.: 2011T110). The Melksham hoard was made up of three phalerae, a Middle Bronze Age dirk fragment, three bronze and two iron spearheads, while the small assemblage from Stockbury contained fragments of two horse bits and a small number of tool fragments and unidentified objects. Even though no socketed axes were present in either of the two hoards, their contents (items of horse harness, very early iron spearheads and a Middle Bronze Age dirk fragment) relate them to Early Iron Age multi-period hoards such as the hoards from Salisbury (Wiltshire, nos. 1061-1202; Plate 91) and the Vale of Wardour (Wiltshire, nos. 1388-1392).

While the hoards from Salisbury and the Vale of Wardour included iron spearheads and objects from the Middle and Early Bronze Age, the deposition of horse bits and phalerae is mirrored in the Llyn Fawr hoard (Glamorgan, nos. 1294-1299) where socketed axes were deposited with phalaere, a yoke mount and two cheek pieces (Plates 127-129). Thus, even though the hoards from Melksham (Wiltshire) and Stockbury (Kent) did not include any socketed axes, their overall contents (items of horse harness and early iron artefacts) generally match the contents of mixed Early Iron Age assemblages.

This great percentage of hoards solely made up of socketed axes or dominated by socketed axes strongly suggests their huge significance in Early Iron Age

metalwork deposition. No other Early Iron Age artefact type was deposited in larger hoards with more numerous artefacts.

6.5. Socketed axes: Contexts

Early Iron Age hoards are diverse in character and this second section will explore the different motivations behind their deposition, discuss the choice of context and look at the geography of their deposition within the landscape.

6.5.1. Contexts: Introduction

Bradley (1990, 5) argued that it is significant where objects were hidden or deposited and that it may be of special significance if they were hidden or deposited in retrievable or irretrievable places. Interpretation of artefacts deposited on dry land can be difficult as there is usually a more complicated structure to the deposition such as the distinction between settlement, hoards or single finds (Bradley 1990, 9). This last group of artefacts found in isolation may have come from a multitude of different locations, for example near or hilltops, near mountain passes, lakes, rivers or rock fissures (Gaythorpe 1903a; 1903b; Clough 1969b; Maier 1977, Biano Perroni 1979; Levy 1982, Warmenbol 1988b). Furthermore, hoards may have been deposited in wet places subsequently drained thus making the irretrievable retrievable (Bradley 1990, 5; Needham 1979, 111-113, 127-128; Pryor 1980a, 488-490).

This section will illustrate and discuss the contextual evidence for Early Iron Age socketed axes in Britain. It will first look at hoards, then at single finds.

6.5.2. Contexts: Hoards

For this research 52 Early Iron Age hoards were analysed. Findspot information was retrieved from the literature, museum records and the finds themselves.

The size of the hoards varies greatly: the smallest hoard analysed is the find from Compton Beauchamp (Oxfordshire, no. 954) where a single Sompting (Tower Hill variant) axe was associated with a small fragment of casting sprue, while the largest associated find is the hoard from Langton Matravers (Dorset, nos. 226-598) which included over 400 axes and axe fragments found in four pits carved into the local chalk. Like the size of the hoards, information about

the find circumstances varies greatly. While we have exact findspot and almost all of the discovery information for the newer finds, such as the hoards from Langton Matravers (Dorset, nos. 226-598), Mylor (Cornwall, nos. 147-179), Vale of Wardour and Hindon (Wiltshire, nos. 1388-1392; 1354-87), we lack much if not all information about the discovery of earlier finds such as Llyn Fawr (Glamorgan, nos. 1294-1299), the small hoard from the Ribble at Clitheroe (Lancashire, nos. 808+809) or the unlikely association of four axes from Thames at Kingston (Surrey, nos. 988-991) which were discovered by workmen dredging lakes and rivers (Crawford and Wheeler 1921, 133-140; Fox and Hyde 1939, 369-404; Evans 1881, 126, fig. 137). Precise lay-out and associations of the different objects were rarely noted. Occasionally, however, exact findspot information was recorded by local antiquarians, even though today the finds themselves are lost: the prime examples here are the hoards from Tillycoultry (Stirling, nos. 1254+1255; O'Connor 2007, 74-9) and Skelmore Heads, Cumbria (Cumbria, nos. 193-198). In both cases, we know more about the find circumstances than about the axes themselves.

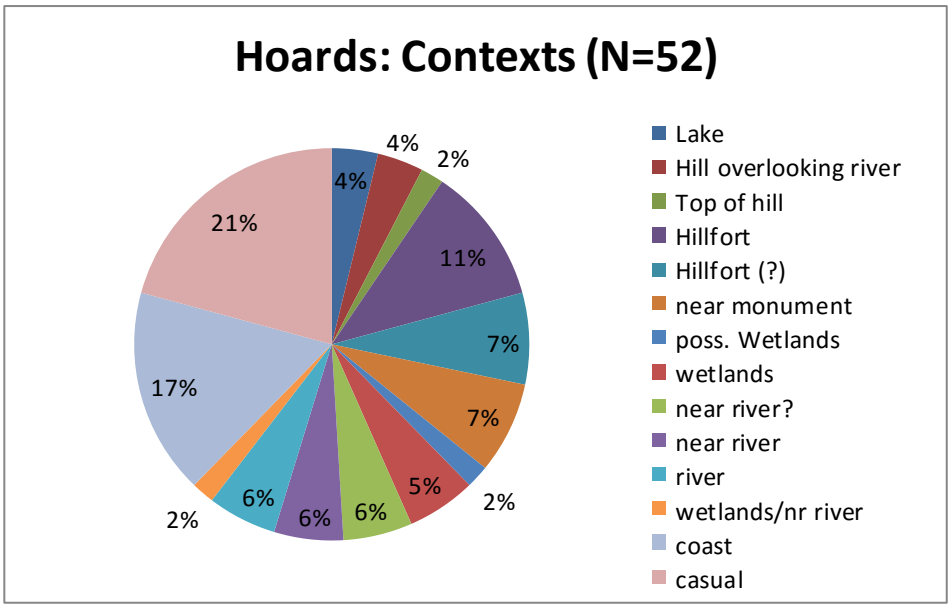


Figure 6.33: Contexts of hoard findspots

Hoard findspots are very varied (fig. 6.33). While nearly a quarter of hoards were deposited casually (21%), quite a few were deposited near the coast (9) or near a hillfort (10 including those marked with (?)), but some were deposited in rivers (3) or wetlands (4) and others near rivers (6 including those marked with (?)). Four hoards were discovered close to ancient monuments.

Two hoards are associated with lakes, but their find circumstances differ greatly (Llyn Fawr, Glamorgan, nos. 1294-1299 and Hindon, Wiltshire, nos. 1354-1387). While the hoard from Llyn Fawr was deposited in a mountain lake, the finds from Hindon came from near Bitham Lake rather than the lake itself. The proximity to the lake may have played a role in the deposition of the hoard, but we cannot be certain of that.

Ten hoards were found near hillforts but none of them were actually discovered within the boundaries of an individual hillfort. Furthermore, individual hoard contents and reason for deposition seem to be very different in each case. For example, the hoard from Danebury (Hampshire, nos. 686-680) was probably deposited immediately before the first phase of the Iron Age hillfort (O'Connor and Cunliffe 1979, 235-7). Cunliffe and O'Connor (1979, 235-7) suggest that the hoard deposition predates any activity within the boundaries of the hillfort and, if connected at all, may have been a votive offering before the work on the hillfort began. In comparison, the small hoard from Skelmore Heads (Cumbria, nos. 193-198) was deposited in a limestone fissure well after the nearby hillfort at Great Urswick was in use and could be interpreted as deposited near an ancient monument rather than a hillfort. The hoard shares this feature with the hoards from Tillycoultry (Stirling, nos. 1254-1255), Cardiff II (Glamorgan, nos. 1292-1293), Sompting (Sussex, nos. 1009-1025) and Figheldean Down (Wiltshire, nos. 1030-1050). However, the hoards from Cardiff II and Sompting were also found very close to the coast which could have added significance to this proximity to an ancient monument.

The great variation amongst findspots of Early Iron Age hoards containing socketed axes remains even if values of uncertainty (question marks and 'possibly') are removed (fig. 16). There is no overall preference for the deposition of Early Iron Age socketed axes in a specific context, such as near a river, a settlement or a monument. However, if simplified even more (with all 'wet' contexts

grouped together) it is evident that wet contexts or contexts near water were preferred: out of 52 hoards 25 were deposited in or near lakes, wetlands, rivers or the coast (figs. 6.34 and 6.35).

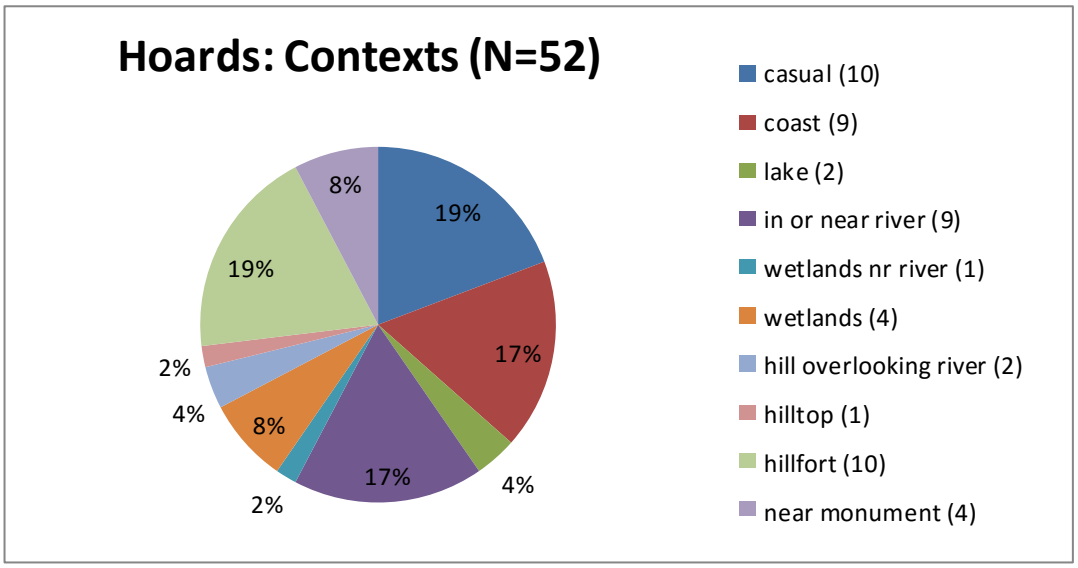


Figure 6.34: Contexts of hoard findspots (excluding qualifiers)

However, even though three of the hoards (6%) were found on top or near the top of a hill, two of them were overlooking rivers (Tintern, Monmouthshire, nos. 1333-1334 and Poolewe, Ross and Cromarty, nos. 1275-1279) which shows that even when deposited on dry land, the proximity to water was perhaps considered significant. Watery contexts were definitely preferred in East Anglia all Early Iron Age socketed axes (except East Rudham axe hoards) were deposited along the Fen edges rather than in the Fens or on completely dry land. This suggests the importance of not completely wet or completely dry contexts but the area in between the two contexts. Being an island, no place in Britain is far from the ocean or a river flowing into the North Sea, Irish Sea or the Channel, so the general proximity of hoard locations to water is not surprising. However, proximity to wet places such as the Fens were deliberately chosen for the deposition of Early Iron Age hoards, but perhaps not because they were wet places but because the places of deposition incorporated both wet and dry. The places of deposition were on the *edges* or the *limits* of the wet area rather than actually fully submerged in the water. For example, the Fen edges were *not* the Fens themselves and a cliff overlooking the coast is *not* the sea. Only one hoard was

actually found *in* a lake and discovered while dredging: Llyn Fawr (Glamorgan, nos. 1292-1299). All the other hoards were located in places where they could have possibly been retrieved. This is different for a number of single finds of Early Iron Age socketed axes, for example in the Thames Basin where most of the single finds were dredged from the Thames meaning that initially, they must have been deposited in the river (see below).

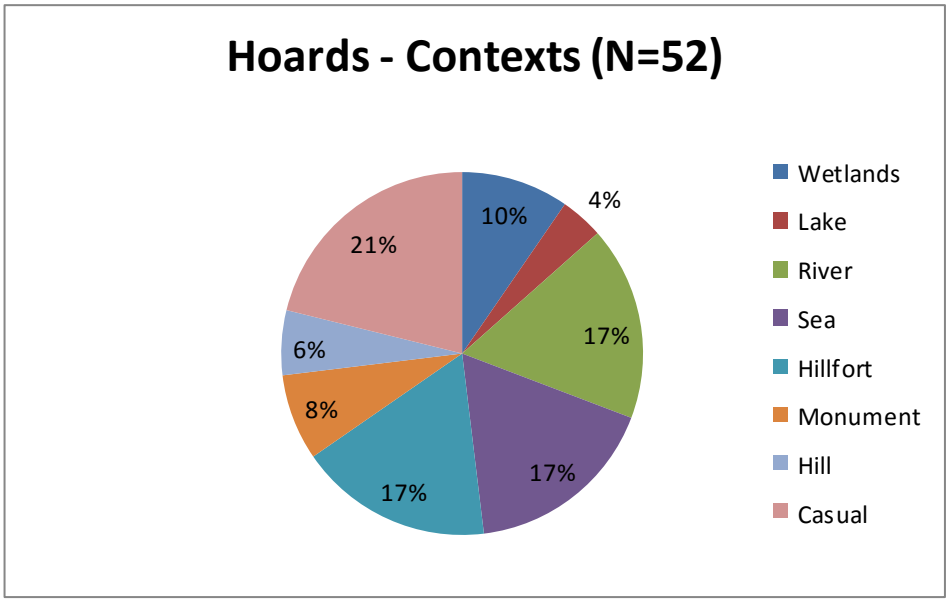


Figure 6.35: Hoards: Contexts (simplified)

There are regional differences in hoard deposition and they will be addressed in Chapter 7, where all hoards will be looked at within their regional contexts and compared with the deposition practice of single finds.

6.5.3. Contexts: Single Finds

For this research sufficient findspot information for 220 socketed axes could be ascertained. This excludes 49 socketed axes whose findspot information was insufficient and two new finds (from Stockbridge, Hampshire, no. 1394, and Shepperton, Surrey, no. 1408). The find from Stockbridge should be listed under "hillfort" because it was found in a field just south of Danebury hillfort and the find from Shepperton, which comes from the marshy areas near the Thames, should be listed under "wetlands".

Region	casual	fort	monument	settlement	near river/river	wetlands/ near river	wetlands	hillfort	high ground	coast	near loch	flood plain
East Anglia	8	1	2	1	5	2	20	0	0	0	0	0
Midlands / North Wales	7	0	2	0	7	8	1	1	3	0	0	0
North	6	0	2	0	4	12	6	1	1	0	0	0
Scotland	3	0	4	2	4	0	0	2	2	4	3	0
South	6	0	4	0	8	2	0	4	0	1	0	1
South East	0	0	0	0	2	0	0	1	0	1	0	0
South West and South Wales	2	0	2	0	4	0	3	2	1	5	0	0
Thames Valley	2	0	0	0	29	4	5	0	1	0	0	1
Total:213	34	1	16	1	63	28	35	11	8	1	0	2

Figure 6.36: Distribution of the single finds' contexts in the individual regions

The individual findspots were plotted meticulously to investigate potential relations between finds and their contexts and surroundings, for example the proximity of known settlement sites or certain aspects of the countryside such as marshy areas, lakes, rivers, ancient monuments, mountains, cliffs or the coast.
The overview over the individual contexts and shows how they differ slightly from each other, for example it was noted if a find was made *in* a river or *near* a river, in wetlands, a floodplain or a ford. Even though these may seem like very similar contexts to us, they may have had very different connotations for prehistoric peoples and may points towards whether a find was possibly retrievable or not (fig. 6.36).
To exemplify this, the single find from a ford in the River Waveney (Outney Common, Suffolk, no. 986) could in fact be an accidental loss if this ford was already in use in the Early Iron Age. However, none of the other socketed axes were found near or in known fords and even though it is likely that some of them were losses in the shallow waters of the Fens or whilst crossing a larger River such as the Thames or the Trent, it does raise some suspicion. There are no

other Early Iron Age socketed axes from fords and it was thus not a very common place for metalwork deposition: it seems more likely that this axe from Outney Common (no. 986) was an ancient loss rather than part of a certain regional tradition of metalwork deposition.

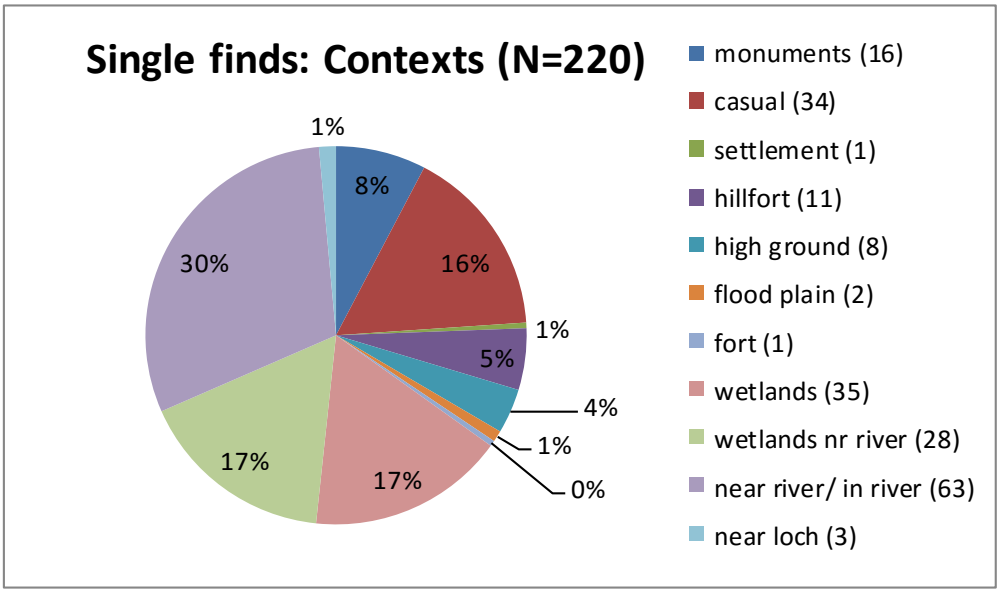


Figure 6.37: Single finds: Contexts

Similar to Early Iron Age hoards, wet locations were generally preferred for the deposition of single finds of socketed axes. Except for findspots described as *casual*, most Early Iron Age axes came from contexts described as *wetlands*, the *coast*, *rivers* and *near rivers* (figs. 6.37 and 6.38). Often these single finds were discovered whilst dredging which means that the majority of single finds of Early Iron Age socketed axes were deposited in a place that rendered the axes deliberately irretrievable (61%) (fig. 6.37).

In addition, 21 axes were deposited in a dry and thus retrievable context, but in close proximity to water (9%) (fig. 6.37). This means that nearly three quarters of Early Iron Age socketed axes were found in or near some kind of wet context. Fifteen were found in the vicinity of a monument and only thirteen were found near a known settlement. None come from inside a known Early Iron Age settlement or a prehistoric monument. The last category (*dry contexts*) comprises 37 finds, 31 of which are casual finds. The remaining six socketed axes were found in dry contexts were discovered in a *casual* location without any monuments, settlements or water nearby. However, there is a (very tentative) con-

nection to higher ground, because these six finds are the socketed axes from Lovehayne, Devon (no. 208, found in a 'gap' on a step hill), Jericho Lodge, Leicestershire (no. 827, overlooking a valley), Greasley and Gotham, Nottinghamshire (nos. 923 and 924, found on high ground), Givendale, Yorkshire (no. 1232, found on a hill/slope) and Corsbie Tower, Legerwood, Berwickshire (no. 1252, found at the foot of a hill).

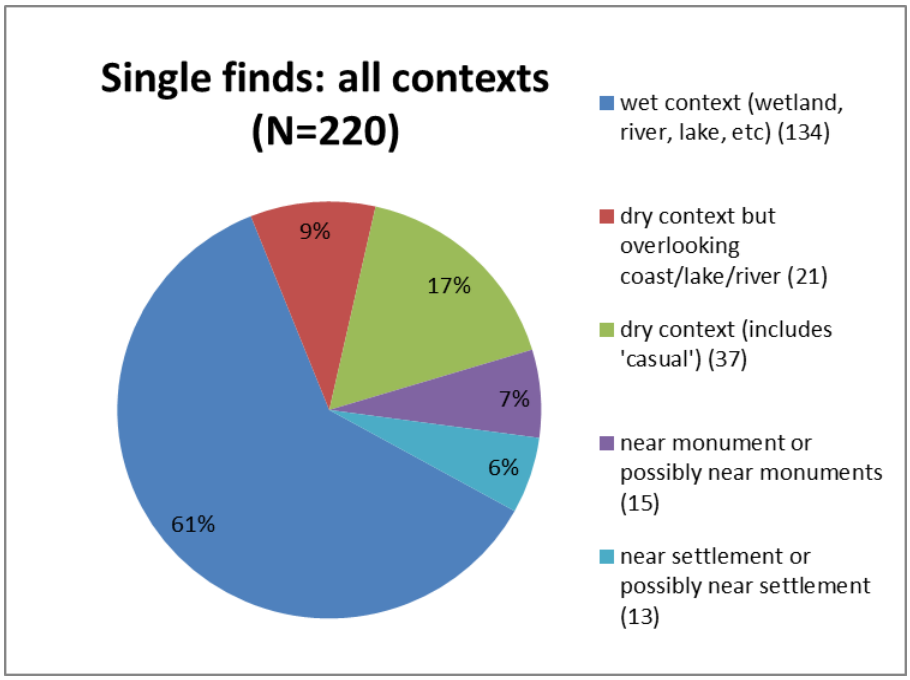


Figure 6.38: Single finds: contexts (simplified)

It could be argued that these six finds found in possibly explainable dry contexts are all accidental losses, but it is equally possible that the 31 casual finds are in fact not casual or accidental losses: they may have been deposited near a yet unknown settlement or an ancient monument which was present in the Early Iron Age but is not known to us now.

With such a large number of socketed axes having been found in wet contexts it is necessary to take a closer look at the individual wet contexts in more detail. Wet contexts range from former wetlands, such as the East Anglian Fens and the Yorkshire Carrs near the North Sea coast, to locations such as rivers to fords.

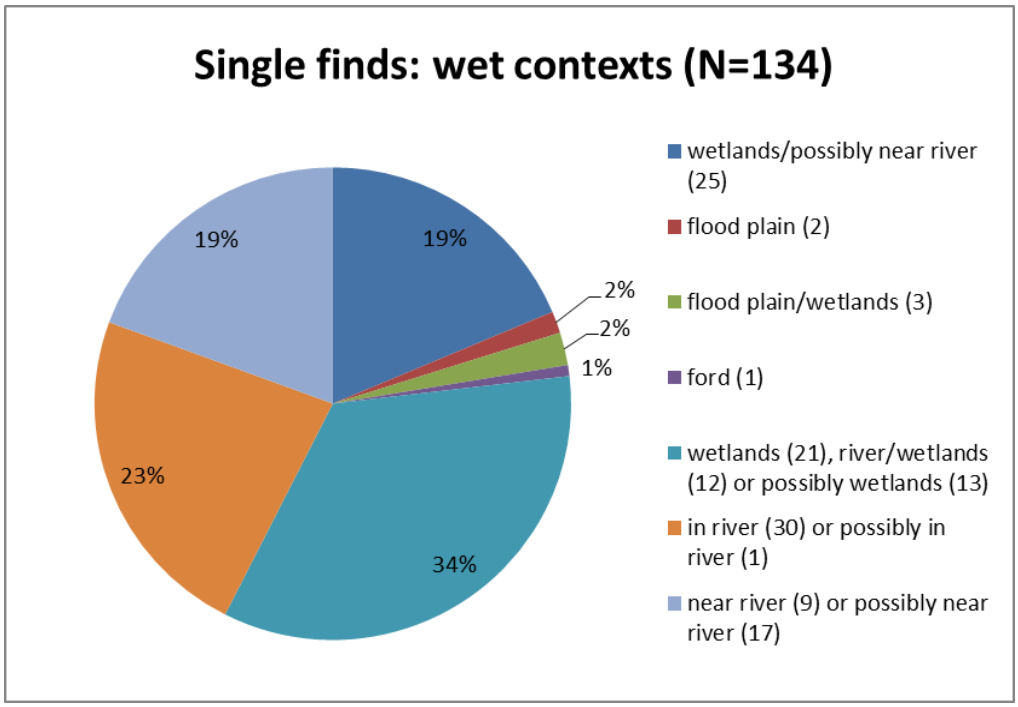


Figure 6.39: Single finds: wet contexts (N=134)

It does not include the 9% (21) of socketed axes that were found on dry land near or overlooking a wet context. Floodplains and fords were not favoured as places for deposition, possibly because items *were* retrievable, not only by the depositor but also by everybody else (figs. 6.39 and 6.40).

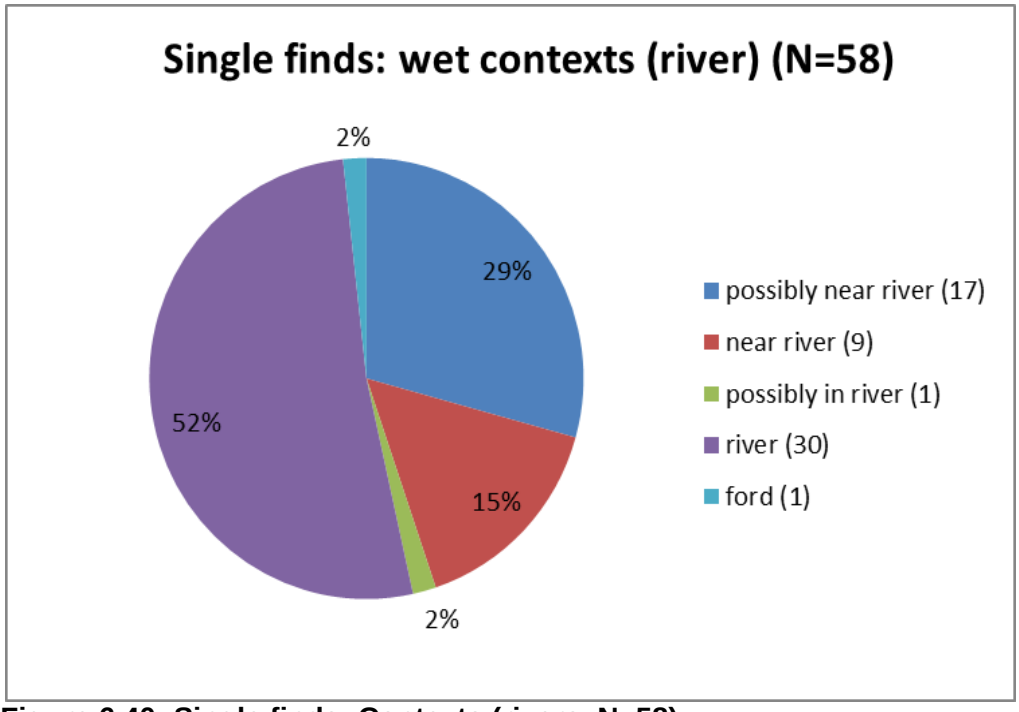


Figure 6.40: Single finds: Contexts (rivers, N=58)

This suggests that places of deposition were not randomly chosen places near water, but places where the deposition was secure, that is irretrievable for the depositor and others. This makes the deposition of Early Iron Age hoards containing socketed axes different from the deposition of single finds of Early Iron Age socketed axes: while hoards were often found in retrievable places, single finds were not. This different is especially relevant for finds from East Anglia and the Thames Basin (confer Chapter 7).

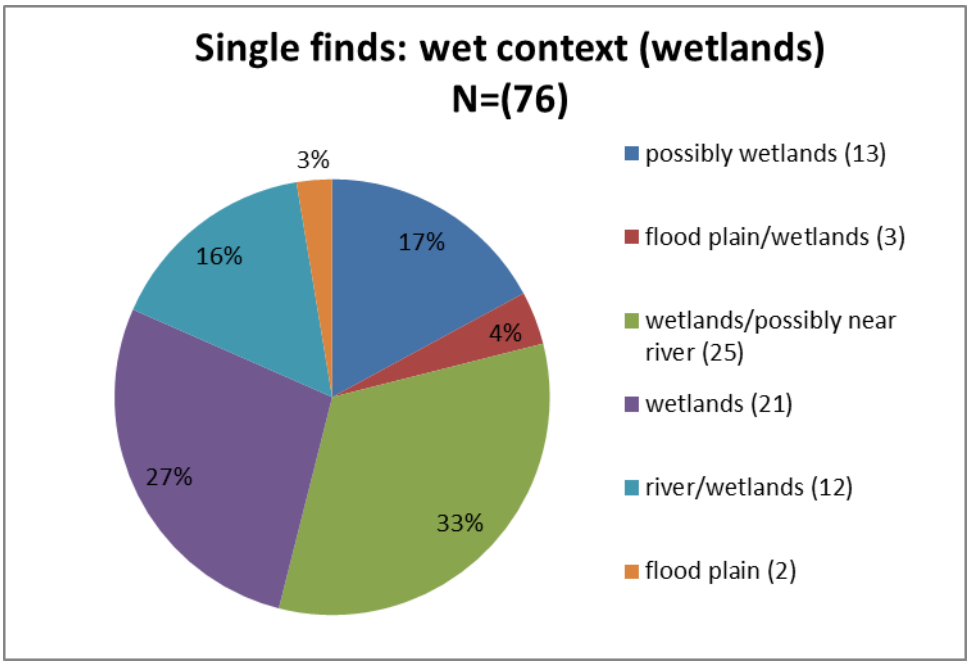


Figure 6.41: Single finds: Contexts (wetlands, N=76)

At least 58 socketed axes (43% of the finds from wet contexts) were found in locations relating to a river. They were found either in a river or on the river bank. Here, we can also add the 25 (19%) wetlands finds that were possibly connected to a nearby river (fig. 6.41). That would mean that over half of the socketed axes found in wetland contexts were found in or near or possibly near rivers. Looking into this further, we can see that over half of these rivers finds come from the rivers themselves (fig. 6.40). Most if not all of those finds were dredged from rivers (especially the Thames and the Trent) in modern times, suggesting that they were deposited in the rivers without the intention of retrival in prehistory. Even when single finds of Early Iron Age socketed axes were de-

posited in wet rather than riverine contexts, preference was given to wetlands near a river or possibly near a river (fig. 6.41).

Flood plains seem to have been the chosen place of deposition in only 4% of cases. It could be argued that, while floodplains were probably subject to more obvious seasonal change being sometimes wet and sometimes dry, rivers (or their courses) and marshes were not necessarily changing to that extent within a lifetime. The East Anglian Fens, the marshy areas around the Thames and the Trent as well as the Yorkshire Carrs may therefore have been considered ideal places for metalwork deposition. The waters would have been murky and the ground very boggy and muddy: it would have been extremely difficult to retrieve an axe once deposited.

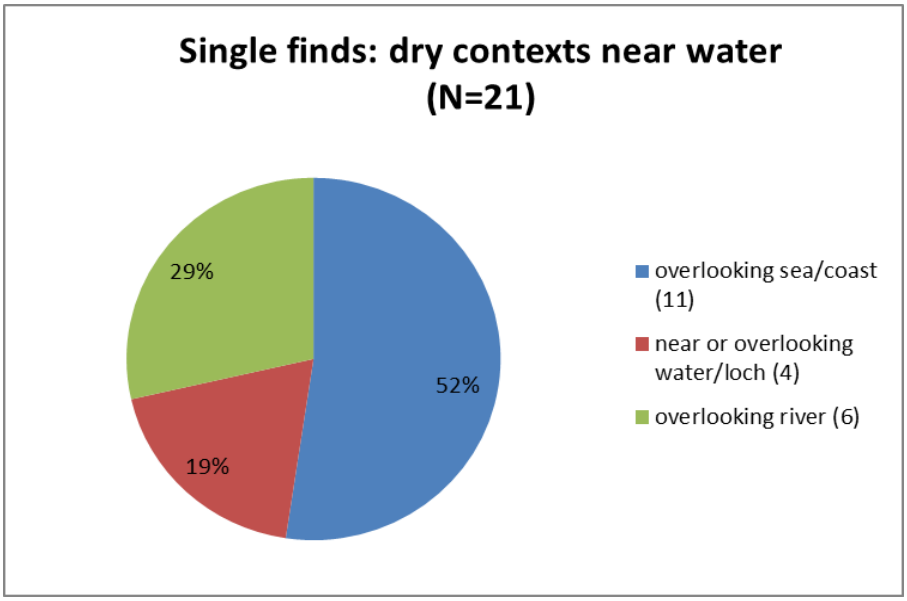


Figure 6.42: Single finds: contexts (dry contexts near water)

The results from the discussion above strongly suggest that rivers are the most important context for depositions in wet contexts. It could therefore be deduced that amongst the dry contexts, the most significant should be the ones near or overlooking rivers. However, the findspot analysis suggests otherwise (fig. 6.42). There is only a small group of single finds (N=21) from dry contexts near water, and over half of them (11) were found overlooking the sea and only 6 were found in dry places overlooking rivers.

Where socketed axes were deposited along the coast, it can be suggested that the chosen places were in some kind of extraordinary setting. This may especially be the case in the south west and south of the country. Three Armorican axes from Cornwall (nos. 185-187) were reported to have been found on a cliff overlooking the coast. One axe was found on the Isle of Portland in Dorset (no. 639) which, geographically, may have been an equally special place relating to both water and land. In this respect, these single finds were deposited in places that mirror those of contemporary hoards found along the south coast from Cornwall to Surrey. Examples include the hoards from Sompting, Ferring and Eastbourne (Sussex, nos. 1009-1025, 998-1008 and 647-648), Ventnor (Isle of White, nos. 776-805), Langton Matravers and Portland (Dorset, nos. 226-598 and 599-609), Mylor and St Erth (Cornwall, nos. 147-179; 180+181).

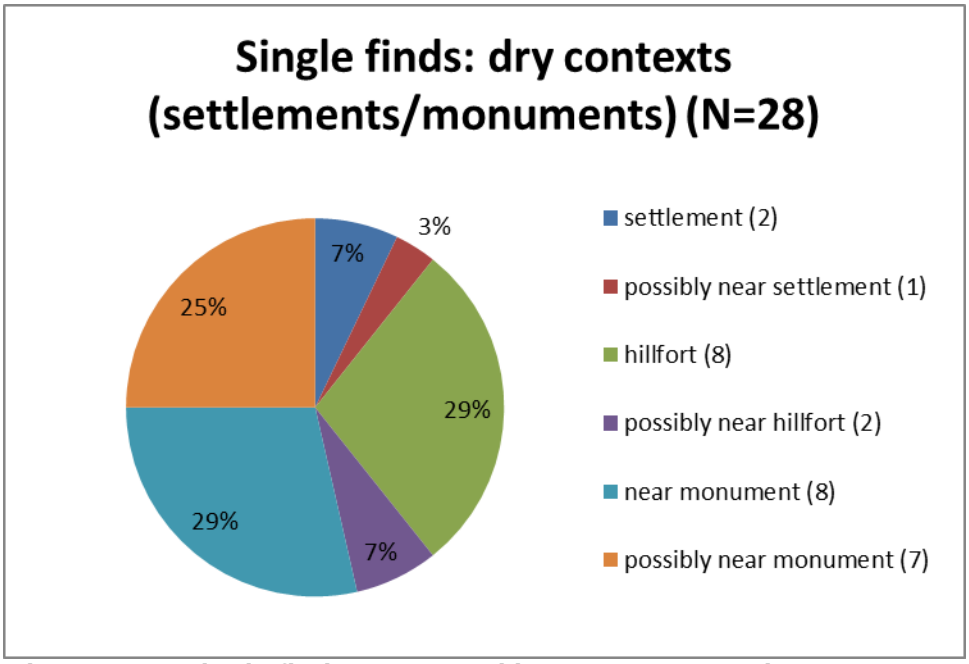


Figure 6.43: Single finds: contexts (dry contexts, N=28)

The remaining 13% of single finds from dry land were discovered either near a settlement or in association with an ancient monument. While depositions in close proximity to known Early Iron Age lowland settlements are almost unknown, hillforts and monuments played more significant role. Only three single finds were found near a settlement while 10 socketed axes were discovered in

association or in possible association with a hillfort and 15 socketed axes in association or possible association with an ancient monument.

The fact that 7% of single finds and 7% of hoards were discovered in association with ancient monuments is striking, and possibly significant, suggesting that these axes were not usually used in such a way as to conjure up the past. However, these 7% were deliberately placed in these locations and so this location may have been significant for that deposition.

6.5.4 Contexts: Discussion

The hoard contexts were extremely varied (52 hoards from 14 different contexts) and there does not seem to be an obvious preference for a single depositional context overall, not even in a certain geographical area. However, there was an overall tendency to deposit Early Iron Age hoards in wet contexts: nearly 50% of hoards were deposited in lakes or rivers or in marshy ground. 18% of hoards were discovered near hillforts and 17% near the coast, which suggests that these places were, though not equally significant, also noteworthy.

The contexts of single finds of socketed axes show a similar tendency towards wet or marshy ground: over half (134 of 220 finds) of the axes were discovered in wet contexts with an additional 21 socketed axes found in dry context near water, such as overlooking the coast, a river or a lake. It seems that omnipresent contexts such as wetlands, marshy areas, rivers or cliffs overlooking the coast were preferred to changeable or interruptible wet contexts such as floodplains and fords. Only 4 socketed axes (out of 134) were found on a floodplain or in a ford which could suggest that it was significant to deposit the axe in a context where it was not easily retrievable. It may also have been important that the water was moving or changing, meaning that the socketed axe was deposited in or very close to a medium of constant change or flow. This could be the reason for why over half of the wetland depositions happened in or near a river. Rivers are the most common place of deposition, especially rivers that empty into the North Sea such as the Trent, the Great Ouse, the Nene and, of course, the Thames. The main water feature of this region, the River Thames, serves to this day as the gateway to England and is the main access into the centre of the country from the North Sea. Allen, Hey and Miles (1997, 115) described the

Thames as having the potential to be a channel of communication, a barrier as well as a defence, but mainly as a political and cultural boundary. The public display metalwork deposition in the Early Iron Age may have been part of the reinforcement of these boundaries. Depositions in rivers which empty into the Irish Sea are extremely rare, the only Early Iron Age example being the small hoard of two socketed axes of Sompting type from the River Ribble (Lancashire, nos. 808-809).

It is significant to note that when deposited on dry land, the majority of single finds were not deposited near rivers but overlooking the sea instead. However, the two most important dry contexts are places near hillforts and locations close to or on the site of ancient monuments with the latter being slightly more important than the former.

This proximity to a prehistoric site is not entirely unexpected for Early Iron Age metalwork hoards containing socketed axes: some of our Early Iron Age hoards are multi-period hoards (as discussed in the first part of this chapter) and include Early, Middle and Late Bronze Age artefacts, which were may have been curated for some time before deposition with contemporary Early Iron Age artefacts (e.g. Danebury, Hampshire, nos. 686-689; Salisbury/Netherhampton, Wiltshire, nos. 1061-1202; Vale of Wardour, Wiltshire, nos. 1388-1392; Poolewe, Ross and Cromarty, nos. 1275-1279; Stead 1998), even though they were deposited at some point in the Early Iron Age.

6.6. Contents and Contexts: Conclusion

Early Iron Age hoards fall into five categories: fragmentary hoards (1), mixed hoards (2), multi-period hoards (4), axe-dominated hoards (7) and axe hoards (39). As with most artificial groupings, the boundaries between some of the hoard categories are not clear-cut. For example, by definition, a multi-period or fragmentary hoard would also be a mixed hoard because like mixed hoards, they also consist of objects of more than one artefact type. However, what sets the four multi-period hoards apart from other mixed and fragmentary hoards is the fact that multi-period hoards include older, possibly curated artefacts which already had some age at the time of deposition.

The deliberate connection with their past that Early Iron Age people displayed at the deposition of multi-period hoards is also reflected in the choice of some of the findspots which were in the direct vicinity of ancient monuments such as the hoard from Tillicoultry (Stirling, nos. 1254+1255) which was found within Cuninghar stone circle (O'Connor 2007, 76) and the hoards from Skelmore Heads and Urswick (Cumbria, nos. 193-198; 1395-1397) which were discovered close to the Neolithic enclosure and hillfort settlement of Skelmore Heads (Harper-Gaythorpe 1903, 310).

Generally, depositional contexts of hoards were extremely varied (52 hoards from 14 different contexts) and there does not seem to be an obvious preference for a single depositional context overall but there was an overall tendency to deposit Early Iron Age hoards in wet contexts: nearly 50% of hoards were deposited in lakes or rivers or in marshy ground.

The contexts of single finds of socketed axes show a similar tendency towards the deposition in wet or marshy ground: over half (134 of 220 finds) of the axes were discovered in wet contexts with an additional 21 socketed axes found in a dry context near water, such as overlooking the coast, a river or a lake.

Early Iron Age people deliberately chose to deposit socketed axes and hoards containing mainly socketed axes in wetlands, marshy areas, rivers or cliffs overlooking the coast. These contexts were preferred to changeable or interruptible wet contexts such as floodplains and fords which, most importantly, are characterised by much shallower waters than rivers or lakes. It was perhaps important to deposit the axe in a context from which it would be difficult – or impossible – to retrieve. It may also have been significant that the water was fast moving or deep, suggesting that the socketed axe was deposited in or very close to a medium of constant change or flow.

Even though rivers are the most common place of deposition, not all rivers were treated in the same way. Metalwork was predominantly deposited in rivers that flow towards the North Sea such as the Trent, the Great Ouse, the Nene and, of course, the Thames, while depositions in rivers which empty into the Irish Sea are extremely rare: we know of only one example: the small hoard from the River Ribble (Lancashire, nos. 808-809).

CHAPTER 7

THE DIFFERENT FACES OF EARLY IRON AGE BRITAIN: REGIONAL DISTRIBUTION OF EARLY IRON AGE SOCKETED AXES

7.1. Introduction

Despite a spell of recent discoveries new finds of Early Iron Age material are comparatively rare and consequently our knowledge is limited. This is true for all areas of Britain but especially so for Scotland, Wales and the North of England where new discoveries of Early Iron Age material are even rarer. In the first decade of the 21st century only two Early Iron Age hoards were reported to local Finds Liaison Officers: the hoard from East Rudham (Norfolk, nos. 845-886, fig. 7.2) which was discovered in May 2001 (pre-Treasure Act Amendment of 2001) and the hoard from Mylor (Cornwall, nos.147-179, Plates 15-21) found in 2005 (Treasure Number: 2005T323).

Since late 2010 six new Early Iron Age hoards have been added to the corpus. Four of these hoards include socketed axes (Hindon, Wiltshire: nos. 1354-78; Vale of Wardour, Wiltshire: nos. 1388-1392; Tisbury, Wiltshire: nos. 1410-1412; Ulverston, Cumbria: nos. 1395-1397), and the other two hoards not containing any axes are important for understanding the contexts of Southern and South Eastern British Early Iron Age sites and hoard deposition. These two hoards come from Hindon (Wiltshire: WILT-A74356; 2011T793) and Stockbury (Kent: KENT-CD6A33; 2011T110). It should be noted here that there are two hoards from the same area in Wiltshire, both named “Hindon”. The smaller hoard, including a large amount of metalwork debris, small socketed axe fragments, a gold sheet fragment, a bronze chisel and a sickle blade fragment (WILT-A74356; 2011T793) was not included in this research because the socketed axe fragments are undiagnostic. The second hoard from Hindon, however, was included because it contained 34 socketed axes (nos. 1354-1387).

More than three quarters of the 1412 socketed axes which were examined for this research were found in hoard contexts. This clearly indicates that in the British Early Iron Age more socketed axes were deposited in association with

other socketed axes or other items of metalwork than deposited singly. It is through association with other objects that we might find meaning behind the depositional process. Looking at other items in Early Iron Age hoards and how rare or common they were in general may help us to judge the importance of socketed axes in British Early Iron Age society.

Associated finds and different contents of hoards from different areas in Britain show a certain regional distribution for most Early Iron Age axe types, especially so for East Rudham, Portland and Blandford types and axes of Sompting types, Cardiff II and Kingston variants. They all have very individual, type-specific regional distributions, comparable to the regional distributions of Late Bronze Age socketed axes of Yorkshire and South Wales/Stogursey types. It may come as a surprise, however, that in Yorkshire and South Wales, the trend discontinued in the Early Iron Age and other regions such as Dorset and East Anglia were now the focus of the production of socketed axes. Neither Yorkshire nor South Wales can offer an equally widely distributed type of socketed axe in the Early Iron Age.

This chapter will discuss the regional distribution of Early Iron Age axe types, looking at each individual region in turn. Each sub-section will include a short discussion of associated metalwork and noted differences to preceding metalwork assemblages. It is hoped that a discussion of the individual regions will facilitate our understanding of how metalwork was used and deposited in different areas.

7.2. A note on the regions

During the course of this research it became evident that certain regional trends in metalwork deposition had been developing throughout the British Late Bronze Age – Early Iron Age transition. The results of these changes are what we can now see manifested in Britain's Early Iron Age Llyn Fawr metalwork assemblage. We can observe subtle differences in the depositions of Early Iron Age socketed axes in different parts of the country which were not noticeable before (O'Connor 2007; Roberts *et al* 2015). Socketed axes seem to have played a different role in depositional practice in different regions across Britain. Some axes were functional tools made from an average copper/tin alloy, others

were non-functional axes made from a high-tin copper-alloy (Stead 1998, 113; Coombs *et al* 2003; O'Connor 2007, 64). It turns out that these non-functional types are region-specific. Also, the role that socketed axes played in Early Iron Age metalwork deposition was greater in some regions (such as the Southern England, the Thames Valley and East Anglia) and possibly of lesser importance in areas such as North Wales, the Midlands, Northern England and Scotland. Even though Early Iron Age socketed axes are represented in nearly every region, the mountainous and upland areas of Scotland, the North East and North West England and the greater part of Wales have produced a much smaller number of axes than, for example, the lowland areas of East Anglia or the Thames Valley. It appears that the deposition of Early Iron Age socketed axes focussed to the greater extent on coastal, riverine and wetland areas such as the Wash, and the Rivers Thames and Trent.

Axe Types--> Region | V	***Hoards***	***Single Finds***	**Transitional**	**Sompting, TH**	**Sompting, King**	**Sompting, FD**	**Sompting, C II**	**East Rudham**	**Portland**	**Blandford**	**Armorican**	**Iron**	**linear-decorated**
East Anglia	***10***	***60***	7	7	9	0	17	3	0	0	3	1	13
Midlands and North Wales	***3***	***31***	8	5	2	0	11	0	0	0	2	1	2
Northern England	***3***	***26***	3	10	5	0	6	0	0	0	1	0	1
Scotland	***3***	***37***	4	5	9	0	2	0	0	0	3	5	0
Southern England	***19***	***33***	8	4	1	1	2	0	3	0	11	1	2
South East England	***3***	***4***	1	0	0	0	0	0	0	0	3	0	0
South West England and South Wales	***9***	***26***	1	1	3	0	2	0	0	0	16	3	0
Thames Valley	***3***	***45***	9	8	9	2	4	0	0	0	2	9	2
Total:	***53***	***262***	41	40	38	3	44	3	3	0	41	20	20

Figure 7.1: Number of socketed axes (single finds) and hoards in each region

An altered regional framework is more appropriate for this metalwork because distinct regional differences can be seen across the UK (figs. 7.1 and 7.3). Figure 7.1 provides a broad overview over the number of associated and unassociated finds of socketed axes and their individual types in each of the eight regions. 11 single finds (nos. 1338-40; 1342; 1344-53), and one hoard (no

1336: “Group from South-West England”) were not included in the table because their findspots were unknown or too uncertain. Moulds and axes of unknown or uncertain types were also excluded. The individual axe types found in hoards were not added to the table. Since most hoards are either multi-period hoards or axe hoards, they will be discussed for each geographical region separately.

Dividing Britain into geographical regions without much bias is difficult. For example, the geography of Britain offers a lowland/highland division which Hawkes suggested indicated regions of heightened social interaction and activity (the Lowlands) and areas of lesser social interaction and activity (the Highlands) (Hawkes 1959, 172-3). Furthermore, modern county boundaries would offer us a convenient way of dividing up the country into regions, but prehistoric regions and distribution patterns rarely conform to modern county boundaries, even though they help us understand the locations of finds and pinpoint their findspots on a map. Nevertheless, when describing finds and using their findspot names, we are already placing a modern prejudice on its geographical location. For example, being multi-period hoards, the hoards from Danebury (Hampshire, nos. 686-689), Netherhampton and Wardour (Wiltshire, nos. 1061-1202) are of similar composition and were discovered only 15-20 miles from each other, but according to modern county boundaries they were found in two different counties. The three hoards are kept in different museums and are being looked after by two different local record offices. However, in content and deposition the hoards are extremely similar suggesting that the people who were responsible for their composition and deposition may have been part of a wider network of communities who shared comparable ideas of how and why metalwork deposition needed to take place in the way it did. Arguably they shared a common set of beliefs or rituals which manifested themself in the similar deposition of similar hoards.

In this chapter, the eight geographical regions and Early Iron Age landscapes will be discussed in turn, starting with South Eastern England and Southern England, then moving north, east and west. Wales needed to be divided into a northern and a southern part, because Early Iron Age contexts in South Wales show more affinities with contexts in South West England and the scarcity of

Early Iron Age socketed axes in North Wales is mirrored to some extent in the Midlands.

The eight regions are:

1. South Eastern England

2. Southern England

3. Thames Valley

4. South West England and South Wales

5. East Anglia

6. Midlands and North Wales

7. Northern England

8. Scotland

In this chapter each of the regions will be described in turn, starting with a general introduction of the area and moving on to a discussion of hoards, single finds and contexts.

Figure 7.2: Part of the East Rudham hoard, (Norfolk, Nos. 845-866) which was found pre-Treasure Act amendment and remains with the finder

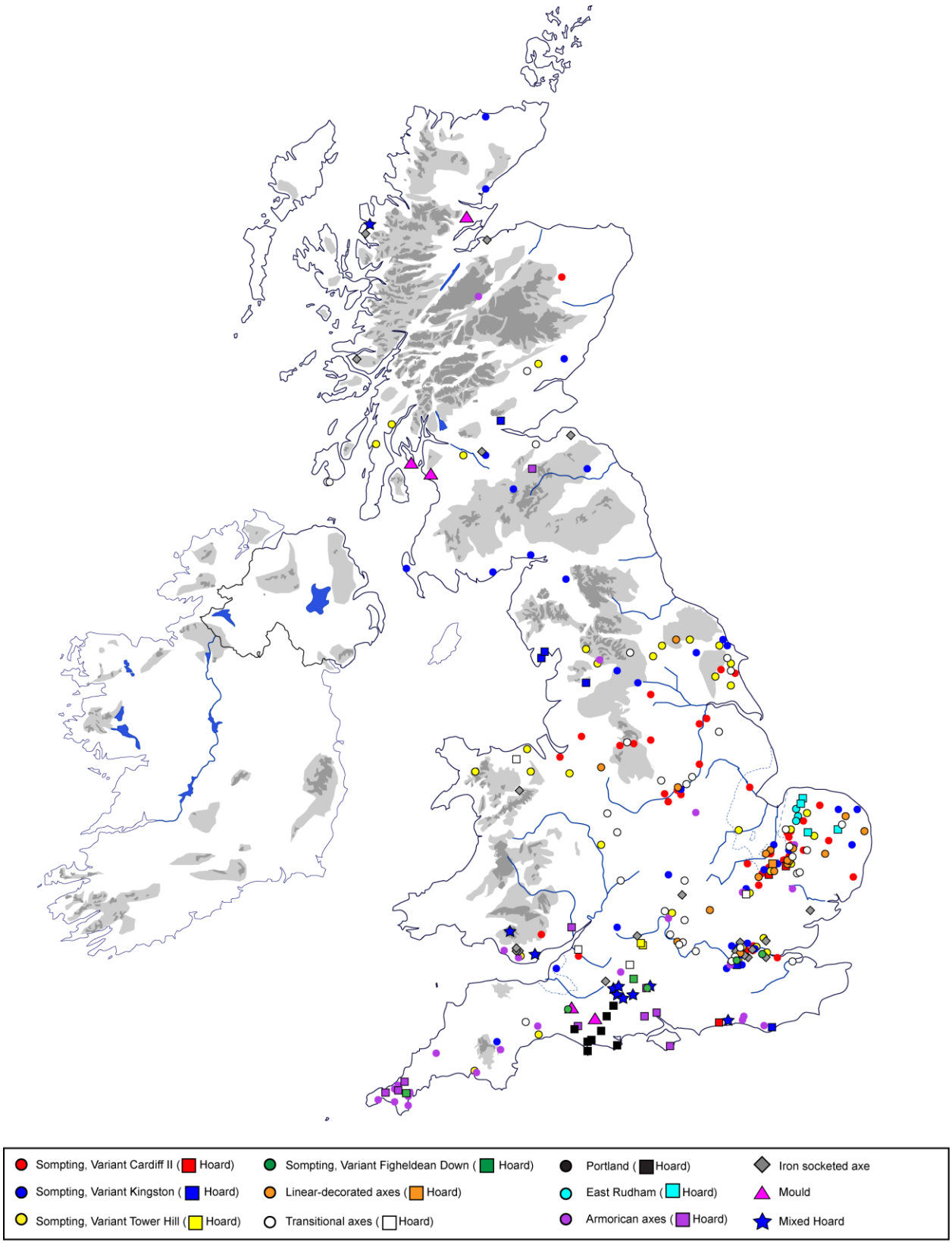


Figure 7.3: Distribution of all Early Iron Age socketed axes (hoards and single finds)

7.3. South East England

The counties that make up the South Eastern region are Kent, East Sussex and West Sussex. The region is comparatively small and it did not produce a large number of axes: there are only four single finds and 28 socketed axes from three hoards (fig. 7.4). Altogether, there are only 32 axes from the entire region. Socketed axes found in Early Iron Age hoards outnumber single finds 7:1.

	Number of axes in hoards	Number of single finds
East Sussex	2	3
West Sussex	26	-
Kent	-	1

Figure 7.4: Number of hoards and single finds from South East England

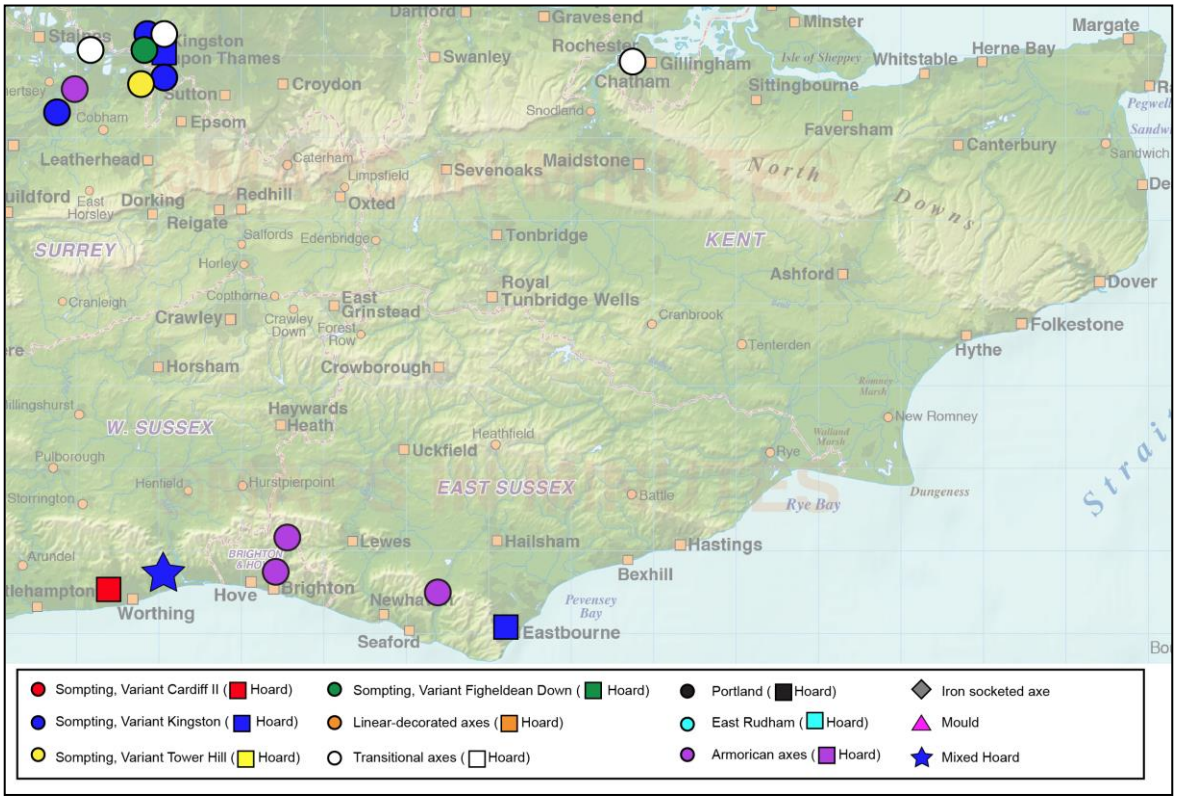


Figure 7.5: Distribution of Early Iron Age socketed axes in South East England (the group in the upper left corner are geographically in the Thames Valley)

Figure 7.6: Locations of Early Iron Age hoards and single finds of socketed axes in the South Eastern region (nos. 1-9 are part of the Thames Valley)

7.3.1. South East England: Hoards

Considering the abundance of Late Bronze Age metalwork from the South East, it is surprising that there is so little evidence of Early Iron Age metalwork. There are only three Early Iron Age hoards from the South East, all concentrated on a narrow strip close to the coast of the Channel, and their contents no longer bear any resemblance to the contents of the Late Bronze Age hoards. Furthermore, the small hoard from Eastbourne (nos. 648-649) and the two larger hoards from Sompting (Sussex, nos. 1009-1025, Plates 75-77) and Ferring (Sussex, 999-1008, Plates 72-74) have all been found outside of Kent, where most of the Late Bronze Age Ewart Park and Carp's Tongue hoards were discovered.

7.3.2. South East England: Single Finds

There were no single finds of Sompting axes from this area (fig. 7.5). The only Early Iron Age socketed axes are the transitional axe from Kent and three Armorican axes from Sussex. The findspots of all single finds tend to be close to the coast except for one Armorican axe which found near the Iron Age hillfort at Hollingbury Hill (East Sussex, no. 1028). The county of Kent produced only one single find, dredged from the River Medway at Chatham, which is very close to the Thames estuary.

Find	Type	Context
807. River Medway at Chatham, Kent	Transitional	River
1026. Alfriston, East Sussex	Armorican	river? monuments?
1027. Brighton, East Sussex	Armorican	near coast
1028. Hollingbury Hill, East Sussex	Armorican	Hillfort

Figure 7.7: South East England: Single finds (types/contexts)

The coastal distribution of single finds corresponds with the location of the hoard findspots.

7.3.3. South East England: Contexts

The places of metalwork deposition along the coast where the hoards were deposited were not chosen at random (fig. 7.8). The hoard from Ferring came from the eastern shore of the Ferring Rife while the hoard from Sompting had

been deposited close to an ancient monument, the Lancing Ring, which probably is of Neolithic origin, as well as near the edge of a coaxial field system (Bradley 2010, 26). Metalwork deposition close to ancient monuments or even inside stone circles are likely to have had a significance for the depositors and the deposition sites were not chosen at random (Bradley and Sheridan 2005, 278-9; O'Connor 2007, 76). For South East England Bradley suggests that finds of metalwork are not normally associated with 'living sites', but rather ancestral sites such as cemeteries, field boundaries or burnt mounts which are located close to settlement sites (Bradley 2010, 13).

Findspot	Axe Types	Axes	Context
648.-649. Eastbourne, East Sussex	Transitional/Sompting	2	near coast
998.-1008. Ferring, West Sussex	Sompting, Cardiff II	9	river
1009.-1025. Sompting, West Sussex	Kingston, Tower Hill, Figheldean Down (?) and East Rudham or linear-decorated	17	near monument

Figure 7.8: South East England: Hoards (axe types/contexts)

7.3.4. South East England: Discussion

A much greater number of Late Bronze Age than Early Iron Age hoards and settlements have been unearthed in South East England. Both Ewart Park and Llyn Fawr metalwork assemblages are dominated by socketed axes, and as a result, most notable differences in this area lie in the quantity and quality of the individual axe types, with the Llyn Fawr axes being of higher quality even though there are fewer of them. They were deposited complete and, in some cases, had never been used (for example in the Sompting hoard), while Ewart Park axes are generally thought to have reached the end of their usefulness and were considered to be scrap, having been deposited broken or damaged and clearly used (Turner 2010, 61, 67).

Early Iron Age socketed axes are predominantly deposited near or overlooking the coast or on a cliff or in or near larger rivers (figs. 7.7 and 7.8), while Late Bronze Age hoards were deposited on the Downs and close to contemporary settlements (e.g. Perkins *et al* 1995, 237-8; Perkins 1997, 232-3; Perkins 1998, 365-7).

Furthermore, the contrast between the condition of the metalwork when deposited and the composition of the hoards suggests that some considerable time had passed between the depositions of Late Bronze Age and Early Iron Age hoards and we are not looking at two contemporary deposition practices. There is no obvious overlap, except perhaps for the possible Gündlingen sword blade fragments which were found the Late Bronze Age hoards from Hoaden II and Birchington III (Isle of Thanet, Kent) as well as in the Early Iron Age hoard from Ferring (West Sussex) (Perkins 1997, 232-373; Perkins 1998, 365-7; Huth 1997, 275).

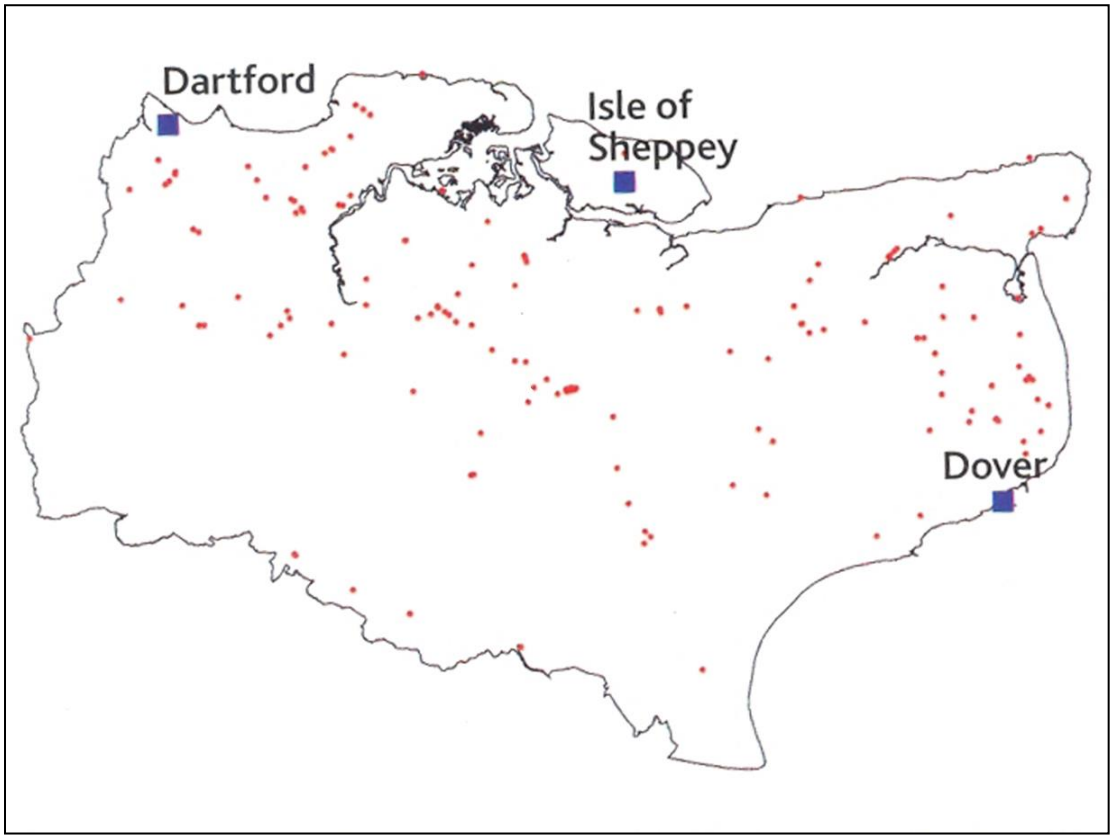


Figure 7.9: Distribution of Late Bronze Age hoards including socketed axes (after J. Jackson, Kent Finds Liaison Officer)

As a result of the small number of Early Iron Age hoards in the South East it is difficult to determine any common patterns, except for the distinctive coastal distribution. However, all three hoards were deposited some distance away from the main focus of the Late Bronze Age depositions of Ewart Park and Carp's Tongue material (Matthews 2012, 33). While Late Bronze Age hoards are concentrated on the chalk bedrock north of the North Downs, especially in

Kent, the three Early Iron Age hoards were deposited in a narrow band of chalk bedrock along the South Downs, very close to the coast. It seems that the sand and clay of the Weald was not preferred for metalwork deposition in the Late Bronze Age or the Early Iron Age (figs. 7.5 and 7.9).

The objects deposited in the three South Eastern hoards are most closely related to East Anglian, Central European and Belgian finds (Coombs 1979, 263). Especially the hoard from Sompting which contains more than three Early Iron Age axes types, that is Sompting type axes (Kingston, Tower Hill and Figheldean Down variants) as well as, unusually, two linear-decorated (nos. 1009-1010). Linear-decorated axes are normally found in East Anglia and in the Thames Basin where they were found along the Fen Edges and along the chalk bedrock in Oxfordshire and Bedfordshire. It is thus not inconceivable that linear-decorated axes were traded or exchanged in the same geological area which they were deposited in, an area dominated by chalk bedrock. After arriving in Sussex, they were deposited with Sompting axes which were equally alien in the region. The geographically closest Sompting axes were found in Wiltshire and the Thames region, but in hoards that differ from the Sompting hoard. Not only did the hoard from Sompting include four different types of axes, it also contained a cauldron of Class B2 (Type Raffrey Bog, Variant Sompting) which because of its wear patterning was evidently old and had been in use for a long time before it was deposited (Gerloff 2010, 218-220, no. 59), and a Continental phalera *(Krempenphalere;* O'Connor 1980, 423, no. 223 and 585, List 227, no. 28.). Both of these alien additions to the hoard connect it to the hoards found in Wiltshire and Glamorgan which also contained axes and artefacts connected with horses and feasting such as cauldrons (Llyn Fawr, Glamorgan) and horse harness (Llyn Fawr and Cardiff II, Glamorgan; Hindon, Wiltshire).

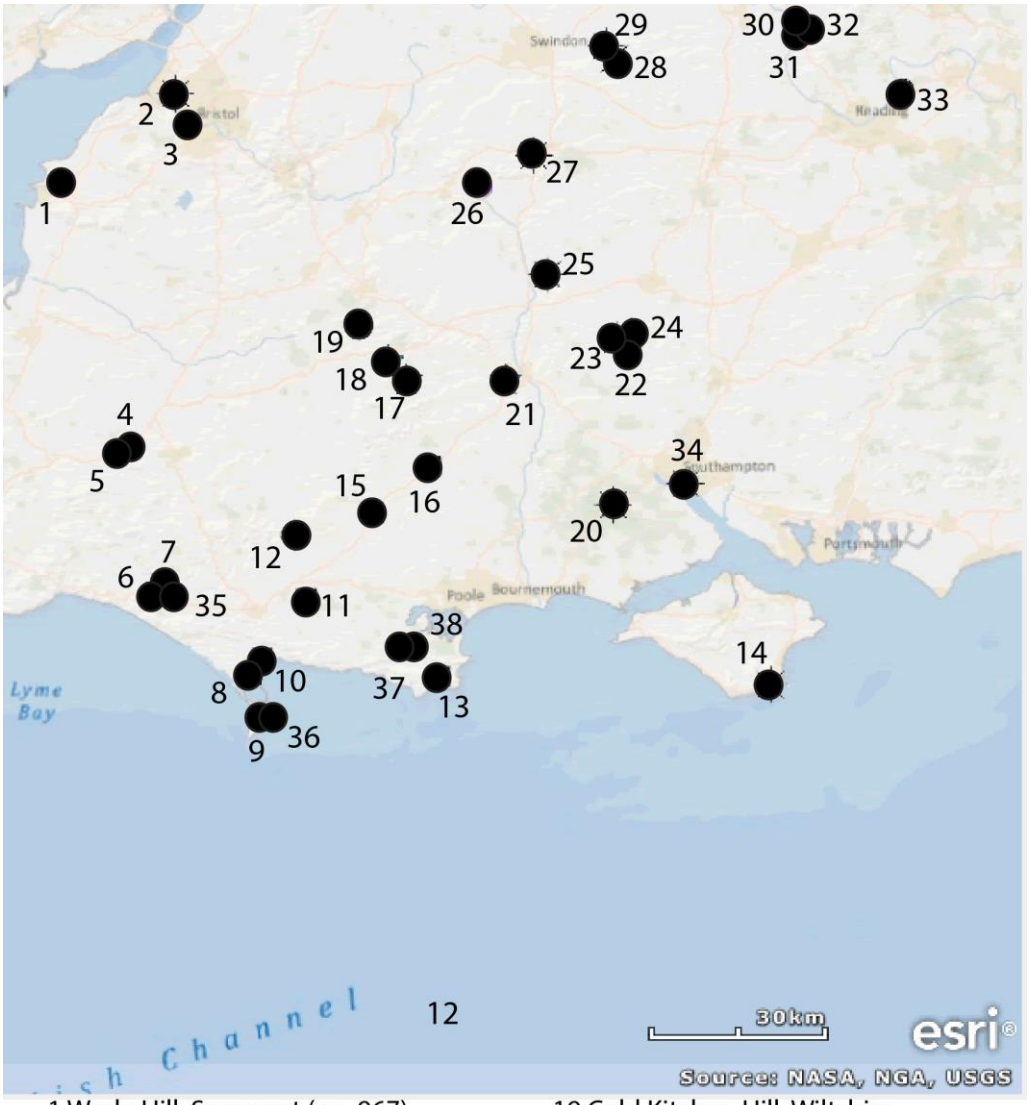
There was no evidence for Early Iron Age horse riding in the South East until a recent discovery from Stockbury (Kent, Portable Antiquities Scheme Finds ID KENT-CD6A33). The small hoard of eight artefacts does not include any socketed axes but amongst other bronze items a bronze bridle bit and three bronze harness rings. The hoard was found in North Kent, probably less than 7km from where a single transitional axe was dredged from the River Medway at Chatham (no. 807, Plate 40).

Copper alloy horse-bits are exceptionally rare in Bronze Age/Early Iron Age Britain and the examples from Stockbury and Hindon are probably the first to be identified from Britain. In his Treasure Report for the Stockbury find, Roberts (2011) suggests that the Stockbury horse bit is of an Early Iron Age type widely known from Central European contexts where they has been classified by Balkwill (1973) as Group 4 Type. In the conclusion of his Treasure Report for Stockbury, Roberts (2011) indicates that Pare (1991, 10) highlights the relationship of Central European Hallstatt C horse-bits to graves containing copper alloy Gündlingen swords. However, Gündlingen swords are rare in south east England with the highest concentration of specimens concentrating on the lower regions of the Thames and sporadic finds in East Anglia and Sussex, including one fragment which came from an Early Iron Age hoard that also included axes of Sompting type, found at the Ferring Rife (Sussex, nos. 999-1008) (O'Connor 2007, 68-71, Fig 5; Gerloff 2004, 142, Fig. 17.8). In the Treasure Report Roberts suggests that the 'Stockbury' horse-bit was placed in a hoard in South East England as a result of networks which stretched throughout temperate Central and Western Europe during the 8th and 7th centuries BC. However, the recent evidence from Wiltshire suggests that although Central European horse-bits and consequently horse riding played a role in Early Iron Age depositional behaviour Gündlingen swords were still treated differently and were not usually included in Early Iron Age depositions in South East and Southern England.

7.4. Southern England

The area of Southern England is broadly based on the outline of the counties of Hampshire, Wiltshire, Dorset, the south-eastern region of Somerset and the Isle of Wight (fig. 7.10).

In contrast to the South East, the Early Iron Age metalwork assemblage of Southern England is not confined to a small number of hoards and a few single finds, but consists of a substantial metalwork assemblage from transitional and Early Iron Age contexts including settlements, middens and ritual, feasting and metalworking sites (fig. 7.11).



1 Worle Hill, Somerset (no. 967)
2 Kings Weston Down, Bristol (nos. 54-73)
3 Hotwells, Bristol (no. 74)
4 Ham Hill, Somerset (no. 965)
5 Ham Hill, Somerset (no. 1409)
6 Eggardon Hill, Dorset (nos. 212-218)
7 Eggardon Hill, Dorset (nos. 219-225)
8 near Weymouth, Dorset (nos. 636-637)
9 Portland, Dorset (nos. 599-609)
10 Jordan Hill, Dorset (nos. 1398-1400)
11 Tincleton, Dorset (nos. 618-635)
12 Melcombe Horsey, Dorset (no. 640)
13 Langton Matr., Dorset (nos. 226-598)
14 Ventnor, Isle of Wight (nos. 775-805)
15 Blandford, Dorset (no. 211)
16 Thorney Down, Dorset (nos. 610-617)
17 Vale of Wardour, Wiltshire
18 Hindon, Wiltshire
19 Cold Kitchen Hill, Wiltshire
20 New Forest, Hampshire
21 Salisbury, Wiltshire
22 Stockbridge, Hampshire
23 Nether Wallop, Hampshire
24 Danebury, Hampshire
25 Figheldean Down, Wiltshire
26 All Cannings Cross, Wiltshire
27 Manton Copse, Wilshire
28 Tower Hill. Oxfordshire
29 Comptin Beauchamp, Oxfordshire
30-32 Wallingford, Oxfordshire
33 Wargrave, Oxfordshire
34 Southampton, Hampshire
35 Bradpole, Dorset (no. 638)
36 Portland, Dorset (no. 639)
37 Wareham, Dorset (no. 642)
38 Wareham, Dorset (no. 643)

Figure 7.10: Location of Early Iron Age hoards and single finds of socketed axes in the South Eastern region

	Number of socketed axes in hoards	Number of single finds of socketed axes
Isle of White	30+	-
Dorset	427+	11 (including 1 mould)
Hampshire	87+	2
Wiltshire	216+	17
Somerset	-	4 (including 1 mould)

Figure 7.11: Numbers of socketed axes (single finds and in hoards) NB: + indicates that this number is the smallest possible number of specimens

However, Early Iron Age socketed axes are uncommon finds from settlement contexts and middens, with just two examples known from Ham Hill (Somerset, no. 965) and the iron socketed axe from Cold Kitchen Hill (Wiltshire, no. 1401). Iron socketed axes are generally more often found in settlement contexts than bronze socketed axes. Bronze axes are much more common in hoards and from possible feasting or ritual deposition sites such as Salisbury (Netherhampton), Hindon and the Vale of Wardour (Wiltshire, nos. 1061-1202; 1388-1392 and 1354-1387).

7.4.1. Southern England: Hoards

There are twenty Early Iron Age hoards from Southern England (figs. 7.10+7.12). This is nearly twice as many hoards as from any other region. These twenty hoards included at least 763 complete socketed axes which is over half of the corpus of Early Iron Age socketed axes from Britain.

These twenty hoards can be split up into three main groups: axe hoards, axe-dominated hoards and multi-period/mixed hoards:

1. *Axe hoards (14)*
    a. *7 Portland type axe hoards (all from Dorset)*
    b. *5 Armorican type axe hoards (mainly from Hampshire and the Isle of Wight)*
    c. *1 Sompting type, Figheldean Down variant axe hoard (Figheldean Down, Wiltshire, nos. 1029-1050)*

d. *1 Transitional type axe hoard (Manton Copse, Wiltshire, nos. 1051- 1060)*

2. *2 Axe-dominated hoards (Blandford, Dorset, no. 211; Hindon, Wiltshire, nos. 1354-1387)*
3. *4 Mixed/multi-period hoards (Salisbury/Netherhampton, Wiltshire, nos. 1061-1202; Vale of Wardour, Wiltshire, nos. 1388-1392; Tisbury II, Wiltshire, nos. 1410-1412; Danebury, Hampshire, nos. 686-689).*

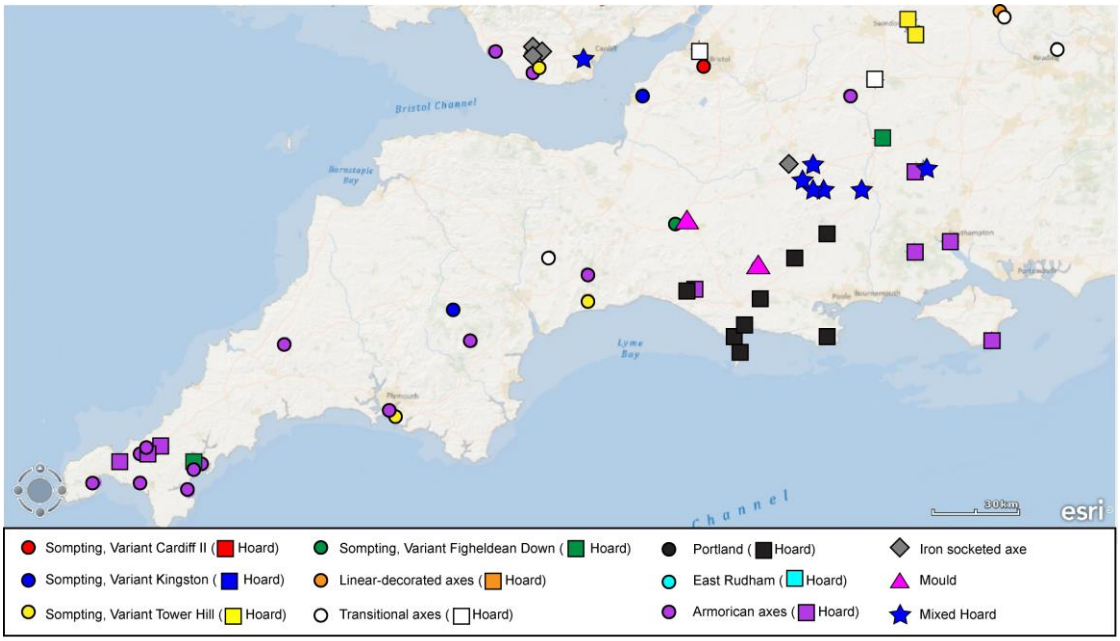


Figure 7.12: Distribution of Early Iron Age socketed axes (hoards and single finds) in South England, South West England and South Wales

The area of Southern England can be split up into three regions which are dominated by three different types of deposition: While the southern part of Hampshire and the Isle of Wight were dominated by axe hoards containing Armorican axes, Dorset is characterised by axe hoards with Blandford and Portland type axes. Mixed and multi-period hoards are prevalent in the Salisbury region, the Vale of Wardour and the Danebury area of Hampshire.

70% of all Early Iron Age hoards from South England were pure axe hoards and 10% of hoards were axe-dominated hoards, which means that they contained mainly socketed axes (fig. 7.13). These 10% are the two hoards from Blandford (Dorset, no. 211) and Thorney Down (Sixpenny Handley, Dorset, nos. 610-617) which both also included small socketed gouges in *as-cast* condition which

were made from a high-tin alloy and appear to have a shiny silvery surface, very much like the socketed axes of Blandford and Portland types that they were associated with. These small gouges also occur in the multi-period/mixed hoards from the Vale of Wardour and the Salisbury (Wiltshire).

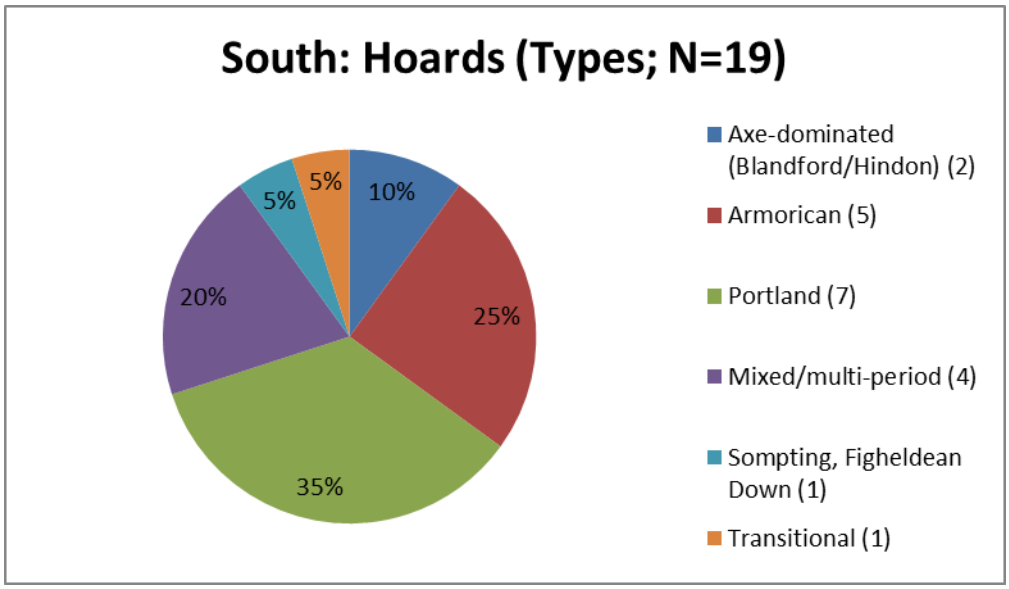


Figure 7.13: South: Hoards types

The two most common axe types in the hoards from the South of England are Portland and Armorican type axes. There are seven hoards containing Portland axes and five hoards containing Armorican axes (fig. 7.13). One of the axe hoards containing Portland type axes is the third largest prehistoric metalwork hoard found in Britain: Langton Matravers (Dorset, nos. 226-598). While Armorican type axe hoards are mainly from the county of Hampshire, almost all the axe hoards containing Portland type axes were discovered in Dorset. The only exception is one large group of Portland type axes (141+) which was discovered as part of the multi-period assemblage from Netherhampton (Wiltshire, nos. 1061-1202).

The individual deposits that make up the hoard from Langton Matravers (Dorset, nos. 226-598) were deposited in four separate pits that had been cut into the local chalk. The axes appeared to have been tightly packed with no particular arrangement (Roberts *et al* 2015). Environmental samples taken at the site suggest that a contemporary settlement was nearby and that the pits

may have been used for grain storage before the deposition of the axes (Roberts *et al* 2015, 4-5). This is a significant point: it means that the pits were not dug for the sole purpose of depositing axes in large quantities; they had been used for grain storage before, but seemingly outlived their initial purpose: they were reused for the deposition of the axes and not opened up again afterwards. However, there may have been at least two occasions when axes were added to pit 6: in this pit, two groups of axes were found – separated by a large stone slab (Roberts *et al* 2015, 4).

Portland type axes are related to two other axe types from Southern England: Blandford and Hindon type axes. Socketed axes of all three types share certain characteristics which relate to only one other axe type: East Rudham type, which is a Norfolk-based type of small high-tin alloy socketed axes. They are not known from any other region.

Portland, Blandford, Hindon and East Rudham type axes were thinly cast, made from a high-tin copper-alloy and extremely brittle. In most cases, they were deposited with their casting seams and clay core still intact. This is why Pearce (1983, 120) suggested for the Southern types that axes of Portland and Blandford type were credible tin ingots, produced by local smiths and deposited in metal-caches in the Early Iron Age as iron spread replacing bronze as the main metal for weapon and tool manufacture. However, their metallurgy suggests a different interpretation. From a metallurgical point of view it can be argued that the alloy was manipulated into turning out a socketed axe with a shiny, silvery surface. Achieving this may have been more important than the stability of the final product. If the colour of the axe was more important than the strength of the alloy we have to ask why. Metal with a silver colouring would have been extremely rare in the Late Bronze Age and Early Iron Age and it would have been a very novel metal colour in the Early Iron Age, before the introduction of firstly iron and secondly, silver. Early iron artefacts must have had a silvery colour when first produced but at that point in time iron may still have been too scarce to be deposited en masse in a hoard and, thus, *de facto*, taken out of circulation. However, occasionally iron artefacts were deposited with bronze artefacts, for example in the hoards from Hindon (Wiltshire, nos. 1354-1387), Melksham, (Wiltshire, does not contain any axes) and Llyn Fawr

(Glamorgan, nos. 1294-1299) but these are exceptional assemblages. If, in the Early Iron Age, iron was too rare or too significant to be consigned to the ground in a votive deposit but was held in higher esteem, it would have been a logical conclusion to make less valuable bronze axes that looked like iron on the outside and deposit silvery-looking bronze artefacts in the place of the more valuable iron artefacts.

It is significant to note that the iron items in these Early Iron Age hoards are not socketed axes. They are predominantly spearheads and sickles: Melksham included two iron spearheads, Llyn Fawr included a spearhead, a sword and a socketed sickle and at Hindon three iron spearheads and an iron tanged sickle.

Name of Hoard, County (Hoard type)	**Number of Axes**
Blandford, Dorset (Blandford)	1
Weymouth, Dorset (Portland)	2
New Forest, Hampshire (Armorican)	2
Preston Down, Dorset (Portland)	3
Danebury, Hampshire (multi-period)	4
Eggardon Hill, Dorset (Armorican)	7
Eggardon Hill, Dorset (Portland)	7
Thorney Down, Dorset (Portland/Blandford)	8
Vale of Wardour, Wiltshire (multi-period)	9
Manton Copse, Wiltshire (transitional)	10
Portland, Dorset (Portland)	11
Nether Wallop, Hampshire (Armorican)	13
Tincleton, Dorset (Portland)	18
Figheldean Down, Wiltshire (Sompting, Figheldean Down)	21
Ventnor, Isle of White (Armorican)	30
Hindon, Wiltshire (Hindon, mixed)	34
near Southampton, Hampshire (Armorican)	68
Netherhampton/Salisbury, Wiltshire (multi-period)	141
Langton Matravers Dorset (Portland)	373

Figure 7.14: South England: Hoards (number of axes included; N=762)

The tanged sickle from Hindon is likely to be a slightly later development which can be paralleled to a sickle from an Early Iron Age site in Wiltshire, All Cannings Cross (Cunnington 1922, 13-18; Cunnington and Cunnington 1923).

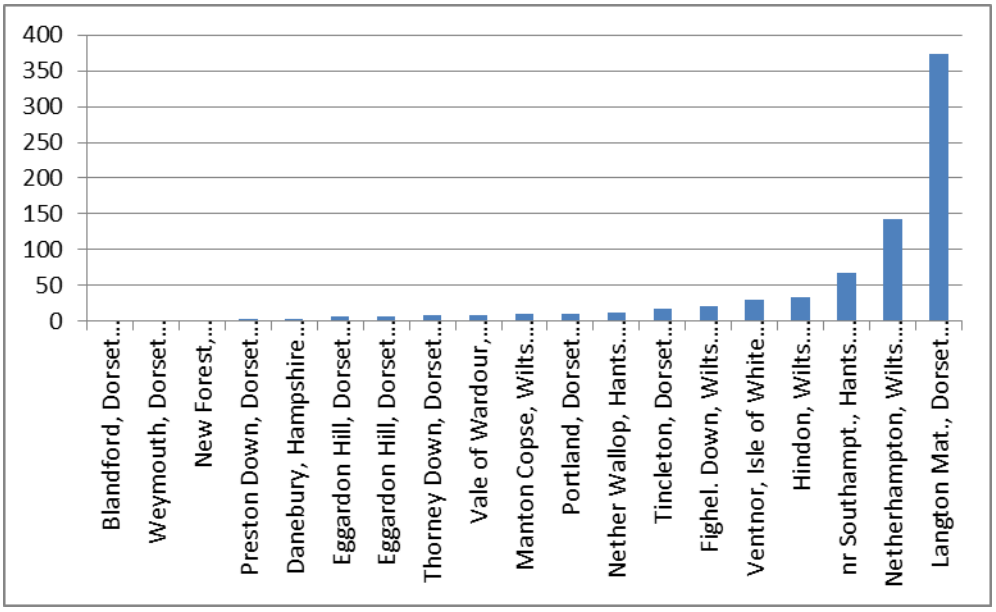


Figure 7.15: South England: number of axes in hoards

The inclusion of iron artefacts and harness rings make the hoard from Hindon an axe-dominated hoard rather than a pure axe hoard. The association of horse harness, iron artefacts and socketed axes connects Hindon with the hoards from Llyn Fawr and Cardiff II (Vale of Glamorgan, nos. 1292-1293; 1294-1299), which also included horse harness, cauldrons and early iron objects (Llyn Fawr).

Wiltshire's mixed and multi-period hoards contain a great number of artefacts of types other than socketed axes. Multi-period hoards are especially significant because they are not common elsewhere in Britain: pure axe hoards are much more frequently found than mixed and multi-period hoards. In 2011-2012, three hoards discovered on the Salisbury Plain and the West Wiltshire Downs have shed more light on this unique deposition practice (Hindon, Vale of Wardour and Tisbury: nos. 1354-1387; 1388-1392 and 1410-1412).

The traditional view of hoards containing an assemblage of contemporary objects was already revisited after the discovery and verification of the Salisbury Hoard (Stead 1998; Yates and Bradley 2010, 1). The artefact ranges in the

Salisbury, Vale of Wardour and Tisbury hoards span more than 1000 years and Stead (1998, 123) suggested that the most likely explanation for this continual use was that the Iron Age people of the Salisbury area came across many of these artefacts by chance during their daily work. The Salisbury hoard, a deposit which was discovered during illicit metal-detecting in the late 1980s near the small village of Netherhampton, contained approximately 535 artefacts, over a third of which were small, silvery axes of Portland type which appear alien in this multi-period assemblage. The hoard is the first large multi-period hoard and its contents suggest that it was deposited in the Middle Iron Age, c. 200BC rather than in the Early Iron Age. Its size and deposition date set it apart from the Vale of Wardour hoard which also contained proportionally fewer axes (nos. 1388-92). The Salisbury hoard contained a small number of Late Bronze Age socketed axes and at least 141 Early Iron Age socketed axes of Portland type (nos. 1061-1095+1097) (Stead 1998, Plates 2, 3, 6 and 15). The hoard also included one axe of Sompting type, Figheldean Down variant (no. 1096) which was made in the same mould as seven of the axes from the Figheldean Down hoard (Tilshead, Wiltshire, nos. 1033-1036; 1043; 1045; 1048) and the single find from near Stockbridge, Hampshire (no. 1394) (figs. 19-21).

This unusual findspot for these Portland type axes (outside of Dorset) suggests that the 141+ axes from Salisbury were not originally deposited in Wiltshire, but may have been re-deposited at Netherhampton with other items dating from the Early Bronze Age to the Middle Iron Age. There is one other artefact in the Salisbury hoard that may provide evidence for possible re-deposition of Early Iron Age artefacts: the large axe from Sompting type axe from Salisbury (no. 1096) was almost certainly made in the same mould as seven of the axes from the Figheldean Down hoard (Wiltshire, nos. 1033-1036; 1043; 1045; 1048) and a single find from Stockbridge (Hampshire, no. 1394). The find from Stockbridge was discovered only 2.5km south of Danebury where another, smaller multi-period hoard was discovered during controlled archaeological excavation (nos. 686-689). It is thus likely that these axes were produced locally and did not travel very far after manufacture. The multi-period hoards from the Vale of Wardour and Salisbury have a very artificial composition: their composition strongly suggests that they were put together in different circumstances or

possibly for different reasons than pure Early Iron Age axes hoards in which axes of Sompting type, Figheldean Down variant and Portland type axes normally occur.

The closest relatives to the Salisbury hoard are the Vale of Wardour and Tisbury hoards which area much smaller mixed/multi-period assemblages (nos. 1388-1392 and 1410-1412). The contents of the Vale of Wardour hoard (114 bronze weapons, tools and ornaments) date from the Early Bronze Age to the Early Iron Age, but unlike the Salisbury hoard which may have been deposited around c. 200BC, the Vale of Wardour hoard was probably deposited in or towards the end of the 6th century BC. Wardour's object range is not as impressive as Salisbury's but in both hoards wood-working tools such as axes, gouges, chisels, awls and punches are prevalent and there are hardly any items of jewellery or fasteners for clothes. Only five of Wardour's nine socketed axes date from the Early Iron Age: nos.1388-1389 (Blandford type), 1390 (Sompting type, Tower Hill variant), 1391 (Armorican type, Couville variant) and 1392 which is remarkably small and may have been used as a pendant rather than an axe, mainly because its loop is, unusually, on one of the faces and not at one of its sides. Axes of similar size and with their loops on their faces were interpreted as pendants elsewhere (Ouessant (Finistère) Hoard: 3 gouges, possibly 5 socketed axes pendant) (Milcent 2012, 148, Pl.47).

7.4.2. Southern England: Single finds

There are only 33 single finds from the South and the majority (one third) are Armorican axes. The South produced almost as many single finds as Scotland (37) and only slightly more than South West England and South Wales (26), North England (26) and the Midlands and North Wales (31) (fig. 7.1). Single finds of Sompting type axes are rare in the South and the hoard from Figheldean Down (21 axes of Sompting, Figheldean Down variant, nos. 1029-1050) is the only hoard of Sompting type axes from this region (fig. 7.16).

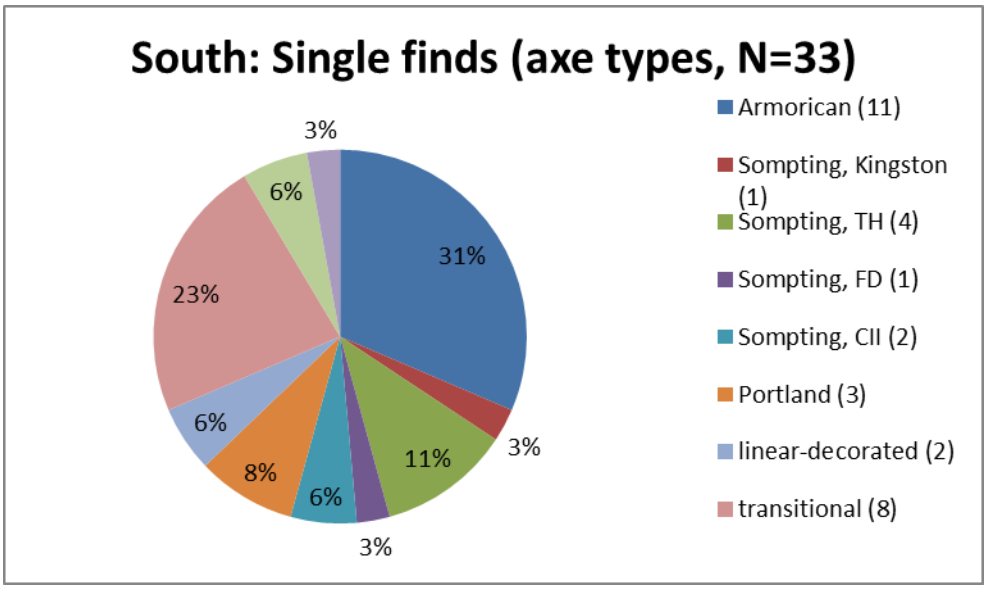


Figure 7.16: South: Single finds (axe types)

There were no single finds of Sompting type axes from Dorset, while Hampshire produced only one: the axe from Stockbridge (no. 1394) which was made in the same mould as seven of the axes from the Figheldean Down hoard (Wiltshire, nos. 1033-1036; 1043; 1045; 1048) and the sole Sompting type axe that was included in the Salisbury hoard (Wiltshire, no. 1096) (figs. 19-21).

Most single finds come from Wiltshire (17 specimens: nos.1203-1219), but none of them were Portland or Blandford type axes which only occur in hoards and as single finds in Dorset.

There are only three single finds of Portland axes while, as we have seen above, there are several and, in case of Langton Matravers, even hundreds deposited in local hoards from Dorset (figs. 7.14+7.15). This suggests that Portland axes did not travel far and the three single finds are either accidental losses or more likely, part of dispersed hoards.

It is perhaps surprising to find two linear-decorated axes in the South (no. 1203: Oldbury Camp, Wiltshire; no. 1210: Pewsey, Wiltshire), given that the majority were found in East Anglia. However, similarities in metalwork composition and casting of Portland axes and the East Anglian East Rudham axes suggest that there a link must have existed between the East and the South of England in the Early Iron Age. The localised distribution (with no axes of these types known from the counties between Norfolk and the South) of these very similar axe types in both regions bears witness to this.

7.4.3. Southern England: Contexts

The contexts in which Early Iron Age socketed axes were deposited in Southern England are similar for both hoards and single finds.

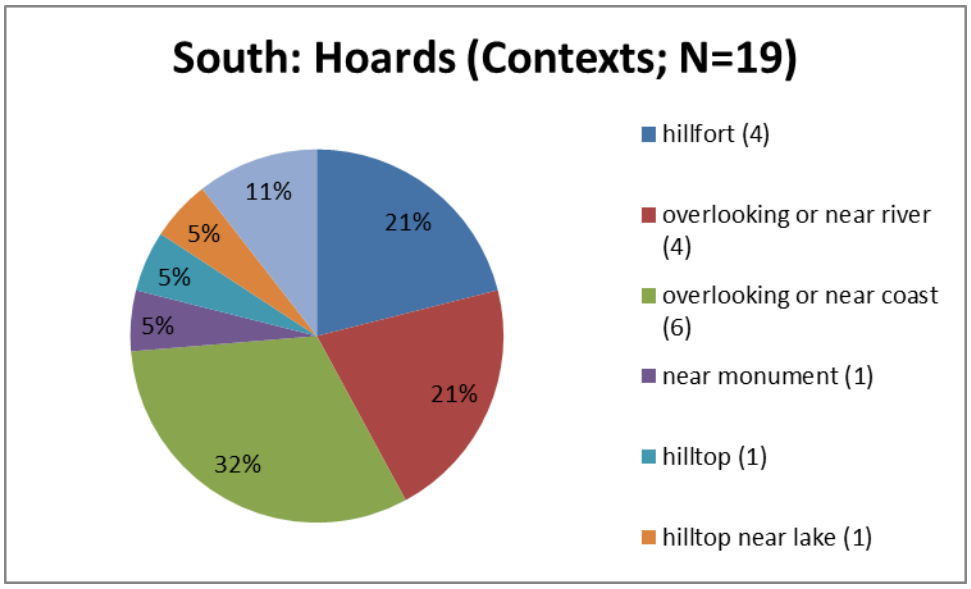


Figure 7.17: South: Hoards (Contexts)

Both hoards and single finds were predominantly deposited in the vicinity of hillforts and/or watery contexts such as rivers or the coast (figs. 7.17 and 7.18). Except for the suspected connection between the Langton Matravers hoards and a nearby contemporary settlement there are hardly any other instances of hoards or single finds deposited in the immediate vicinity of settlements unless these settlements were hillforts, such as Danebury (Hampshire) and Eggardon Hill (Dorset) where several hoards were discovered in the immediate vicinity. For single finds the presence of rivers appears to hold more significance than locations on the coast overlooking the sea which was a more important aspect for hoard depositions.

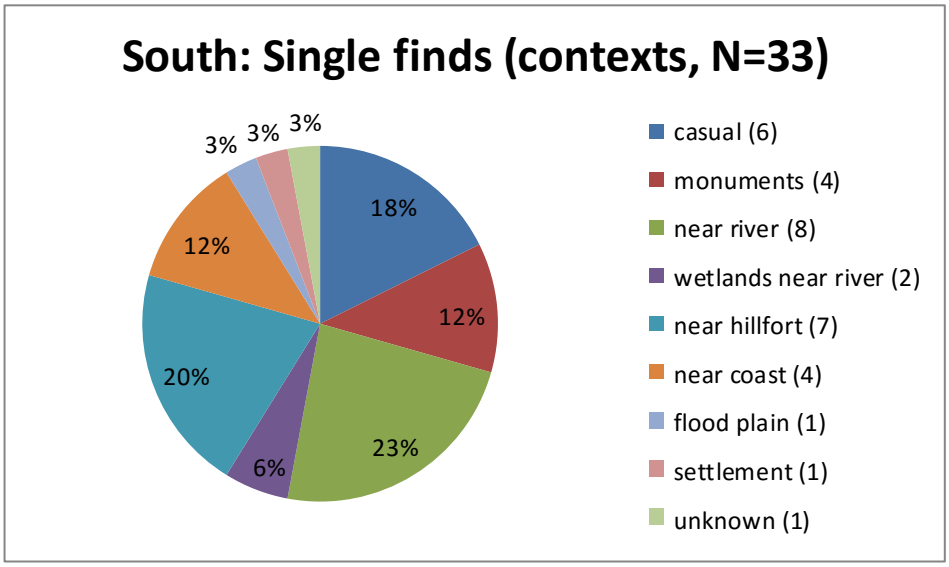


Figure 7.18: South: Single finds (contexts)

7.4.4. Southern England: Discussion

The counties of Dorset (437 axes), Wiltshire (233 axes) and Hampshire (89 axes) have the highest concentrations of Early Iron Age socketed axes overall. Over half of the known Early Iron Age axes from the UK come from the South of England (864 axes of 1412) and nearly half of these came from one site: the multiple depositions at Langton Matravers (Dorset, nos. 226-598). Similar to the situation in the South East, hoard finds outnumber single finds.

According to the contents of the Southern hoards, three geographical areas with different deposition practices can be suggested:

1. *Salisbury Plain and West Wiltshire Downs (mixed/multi-period hoards)*
2. *Isle of Portland, Weymouth Downs and Dorset Downs (Portland axe hoards)*
3. *Isle of Wight, New Forest and Hampshire Downs (Armorican axe hoards)*

While multi-period (1) and Portland axe hoards (2) are unique to Southern England there is another cluster of Armorican axe hoards located in the furthest South West of England, the Cornish peninsula. Here, single finds of Armorican axes occur more frequently than hoards while on the Isle of Wight and in Hampshire Armorican axe hoards dominate: Ventnor (Isle of Wight, nos. 775-805), Nether Wallop (Hampshire, nos. 690-702), New Forest (Hampshire, nos.

703-704) and the large hoard from ‘near Southampton’ (Hampshire, nos. 705-772).

Cunliffe (1991, 532) argues that throughout the Earliest Iron Age, the connection between Southern England and Northern France was exceptionally strong and reflected most prominently in the cross-Channel movement of Armorican axes. The strong geographical connection is hardly surprising since the highest concentration of Armorican axes can be found in Brittany in North West France.

Unlike Armorican axes which are found in large numbers in many locations distributed over a large geographical area, socketed axes of Portland type are a very localised axe type and even though some of them were found as part of the Salisbury hoard (Wiltshire, nos. 1061-1202), most of them were found on Dorset’s south coast and near the hillfort settlement at Eggardon Hill (Dorset, nos. 219-225). Portland type axes are concentrated on the areas of chalk bedrock in Dorset, while most of the Armorican hoards come from Hampshire and the Isle of White.

The five multi-period or mixed hoards are concentrated on a fairly small geographical area to the west of Netherhampton in Wiltshire, even though there is one outliner: the small hoard from Danebury in Hampshire (nos. 686-689). Nearly all of these mixed hoards are connected and interrelated through certain artefact types, especially Blandford and Portland type socketed axes, socketed sickle fragments (present in the hoards from Wardour, Netherhampton, Hindon and the small new assemblage, also from Hindon (Portable Antiquities Scheme Find ID: WILT-A74356; Treasure Number: 2011/T793), winged chapes (Wardour and Netherhampton) and annular razors (Salisbury and Danebury).

The multi-period hoards are also related to the only Sompting axe hoard from Southern England, the group of 21 Sompting type, Figheldean Down variant axes from Figheldean Down, Wiltshire (nos. 1029-1050), as well as a single find from Hampshire (Stockbridge, no. 1394). Four of the axes from Figheldean Down (nos. 1033-1036), the single large axe from Salisbury/Netherhampton (no.1096) and the single find from Stockbridge (no. 1394) were cast in the same mould or made from the same mould template (figs. 7.19-7.21).

Furthermore, they did not show any or hardly any sign of use or wear suggesting that they were made and deposited roughly at the same time, possibly even by the same person.

Figure 7.19 (left): Overlay of socketed axes nos. 1033 and 1096

Figure 7.20 (right): Socketed axe from Stockbridge (Hampshire, no. 1394)

Figure 7.21 (below): Socketed axes from Figheldean Down and Salisbury (Wiltshire, nos. 1033-1036 and 1096 – central one with red string)

This is an important connection as the usual absence of additional artefact types in the axe hoards makes cross-dating extremely difficult. However, mould or template matches may provide an important link between individual axe hoards, but of course, a template (and one or several copies) could be made from any axe at any time. Regardless, similar depositions, contexts and metallurgy shows intent to create a deliberate association at a similar time but in two different places and an attempt to mirror depositional practice across multiple events.

The only axe-dominated hoard in the Salisbury-group of hoards is the hoard from Hindon, which included 30 high-tin alloy bronze socketed axes that are, in size, metallurgy and finish without doubt related to axes of Portland type, Blandford type and the East Anglian East Rudham type. Even though decoration on all four types is different, their metallurgy and deliberate silver surface finish is extremely similar.

Looking at the multi-period hoards that were found in the immediate neighbourhood of the axe-dominated Hindon hoard, we can see that while the contents were very different, their deposition pattern was similar. Unlike the groups of axes at Langton Matravers which were deposited in pre-cut pits in the chalk, all five mixed hoards were found loosely associated in the ground (Katie Hinds *pers. comm.*, former Finds Liaison Officer for Wiltshire). They were deposited close to the surface and appear to have been scattered rather than carefully placed or arranged. Except for the assemblage found at Salisbury, no pits had been cut especially for the hoards' deposition and they were not deposited re-used pits like the hoards at Langton Matravers.

Its context is not the only difference between the Salisbury hoard and the other multi-period hoards: the Salisbury hoard included more artefact types than the other hoards. Early Iron Age material such as trapezoidal and annular razors, winged chapes, socketed leather-working knives, Portland type axes had been deposited alongside Middle Iron Age material such as decorated miniature shield and miniature cauldrons (Stead 1998). The later date for the deposition of this hoard suggests that the entire hoard may have been re-deposited once again in the Middle Iron Age. This could also explain this renewed change in

depositional context: while the multi-period hoards that were deposited in the Early Iron Age were scattered, this slightly later Middle Iron Age deposition was once again placed in a pit that had been cut previously for possible grain storage.

Discoveries of large surface scatters of Early Iron Age artefacts as well as metalworking debris indicate that these sites could have been middens such as Chisenbury and Potterne, two well-known midden sites in Wiltshire (Brown, *et al* 1994; McOmish 1996; Lawson 2000). These midden sites are normally made up of a great number of animal bones, ceramic materials and metalwork, and they are interpreted as abandoned meeting and feasting sites, possibly involving battle re-enactments and conspicuous consumption (Brown, Field and McOmish 1994; Lawson 2000; Sharples and Waddington 2011).

Two of the most prolific Early Iron Age midden sites in Wiltshire are Potterne and All Cannings Cross, from which the characteristic pottery style of this period takes its name (Cunnington and Cunnington 1923; Lawson 2000). The pottery from All Cannings Cross heavily influenced the pottery typology of the Earliest Iron Age, but there is also a great corpus of Late Bronze Age and Early Iron Age bronze metalwork from the site (e.g. axe fragments, gouges, pins, etc. (Cunnington and Cunnington 1923, Plates 17+18). Most importantly, however, the site yielded an unparalleled corpus of early iron metalwork, e.g. a very simple early iron brooch (Cunnington and Cunnington, pl. 19, 10), tools such as gouges and knives (Cunnington and Cunnington, pl. 20) and ornaments such as swan's neck, ring-headed and vase-headed pins (Cunnington and Cunnington, pl. 21). Recent analysis of the site suggests that it was not a settlement but may have been a series of middens, similar to the midden sites of Potterne and East Chisenbury (Brown *et al* 1994).

The midden excavated at Potterne provides ample evidence for Late Bronze Age and Early Iron Age metalwork as well as radiocarbon dates for the end of the Bronze Age and the Earliest Iron Age material (Lawson 2000, 166-7, 257). While the pottery assemblage from Potterne's zone 7 yielded two C14 dates in the 9th century BC, one of the deposits from zone 4 (which included All Cannings Cross style pottery) provided two C14 dates in the 6th century BC (Lawson 2000, 202-3). Looking at Potterne's features, Lawson observes that a

regularly-seen advancement in Early Iron Age sites is the regular use of storage pits which probably point towards further development of the economy with an emphasis on the storage of grain and other foodstuffs (Lawson 2000, 252; Cunliffe 1991, 380). Storage pits such as these are also known from Langton Matravers (Dorset) and Netherhampton (Wiltshire), where they seem to have been reused as deposition pits for numerous socketed axes of Portland and Blandford types (Roberts *et al* 2015*;* Stead 1998, 110-112).

7.5. South West England and South Wales

The region of South West England and South Wales includes, on the English side, the counties of Avon, Bristol, the western part of Somerset, Devon and Cornwall and on the Welsh side, the counties bordering the Bristol Channel that is Pembrokeshire, Carmarthenshire and the smaller counties and unitary authorities which are located between Swansea, the Vale of Glamorgan and Monmouthshire (fig. 7.22).

	Number of axes in hoards	**Number of single finds**
Avon	-	-
Bristol	2+	1
North Somerset	-	1
Devon	-	7
Cornwall	77+	11
Pembrokeshire	-	-
Carmarthenshire	-	-
Vale of Glamorgan, Swansea, Monmouthshire	9	5

Figure 7.22: Numbers of socketed axes from hoards and single finds from South West England

In terms of numbers of socketed axes from hoards and discovered singly, the results mirror those from the South East and the South: axes from hoards clearly outnumber unassociated finds, in this case more than 3:1 (25 single

finds and 88+ axes from 10 hoards). The county of Cornwall produced the greatest numbers of socketed axes by far (88 of 113 axes from the South West). It is also noticeable that there are no finds of Early Iron Age socketed axes from the northern coastal areas of the English South West or South West Wales (figs. 7.23+7.24). The majority of axes found in the South West are concentrated in Cornwall on the English side and the Vale of Glamorgan on the Welsh side.

The results of this research suggest that in terms of Early Iron Age socketed axes, Wales can be divided into two areas: North and South. While Central Wales is void of Early Iron Age socketed axes in general, the evidence shows that while socketed axes from South Wales share similarities with socketed axes from South West England and the Atlantic fringe as well as the Thames Valley and Central Europe, the North Welsh axes shows more affinities with axes from the North of England and Scotland.

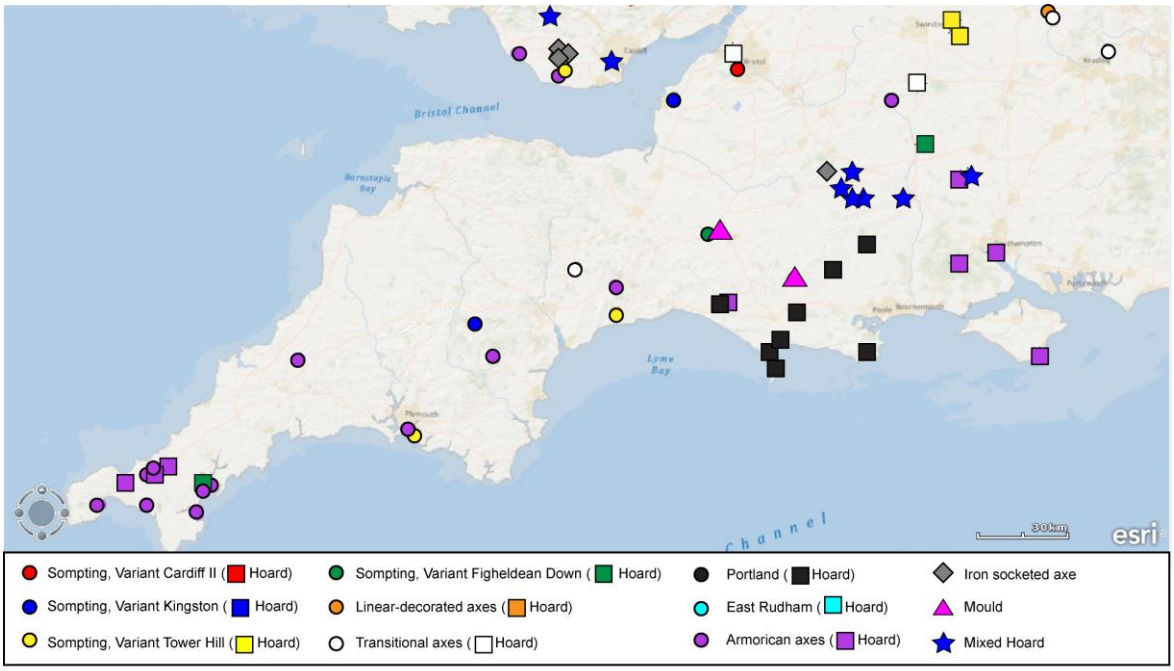
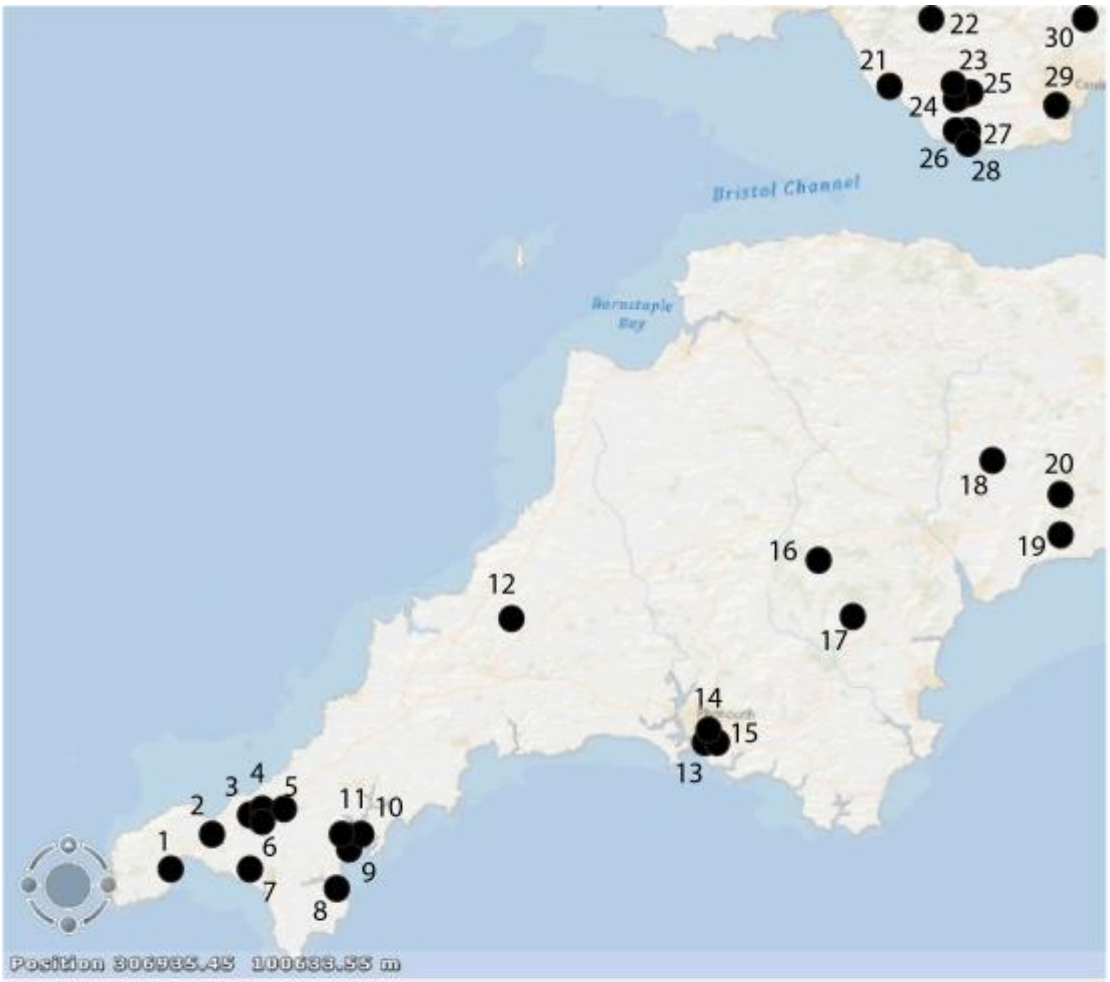


Figure 7.23: Distribution of Early Iron Age socketed axes (hoards and single finds) in South England, South West England and South Wales



1 Newlyn, Cornwall (no. 186)
2 St Erth, Cornwall (nos. 180-181)
3 Barripper, Cornwall (no. 182)
4 Penponds, Cornwall (no. 188)
5 Carn Brea, Cornwall (nos. 103-104)
6 Gwinear, Cornwall (nos. 105-146)
7 Breage, Cornwall (no. 183)
8 Gillan, Cornwall (no. 185)
9 Falmouth, Cornwall (no. 184)
10 Mylor, Cornwall (no. 187)
11 Mylor, Cornwall (nos. 147-179)
12 Penquite, Cornwall (no. 189)
13 Mountbatten, Devon (no. 209)
14 Mountbatten, Devon (no. 2010a)
15 Mountbatten, Devon (no. 210b)
16 Chagford, Devon (no. 204)
17 Haytor, Devon (no. 206)
18 Cullompton, Devon (no. 205)
19 Lovehayne, Devon (no. 208)
20 Honiton, Devon (no. 207)
21 Newton Nottage, Glam. (no.1331)
22 Llyn Fawr, Glam. (nos. 1294-1299)
23 Penllyn Moor, Glam. (no. 1328)
24 Penllyn Moor, Glam. (no. 1329)
25 Penllyn Moor, Glam. (no. 1330)
26 Llanmaes, Glamorgan (no. 1405)
27 Llanmaes, Glamorgan (no. 1406)
28 Llanmaes, Glamorgan (no. 1407)
29 Cardiff II, Glamorgan (nos. 1292-3)
30 Abercarn, Monmouth (no. 1335)

Figure 7.24: Location of Early Iron Age hoards containing socketed axes and single finds of socketed axes in South West England and South Wales

7.5.1. South West England and South Wales: Hoards

There are only nine Early Iron Age hoards from the South West: one from Bristol (King's Weston Down, nos. 54-73, Plates 1-3), four from Cornwall (Carn Brea, nos. 103-104; Higher Roseworthy, nos. 105-146; Mylor, nos. 147-179; St Erth, nos. 180-181, Plates 15-21), two from Glamorgan (Cardiff II, nos. 1292-1293; Llyn Fawr, nos. 1294-1299, Plates 119-130), one from Monmouthshire (Tintern, nos. 1333-1334, Plates 132-133) and one very uncertain group from the 'South West' (nos.1336+). Four of these nine hoards contained only Armorican axes: three were found in Cornwall (Carn Brea, nos. 103-104, Higher Roseworthy, nos. 105-146, and St Erth, nos. 180-181) and one comes from Chapel Hill (Tintern, Monmouthshire, nos. 1333-1334) (fig. 7.25).

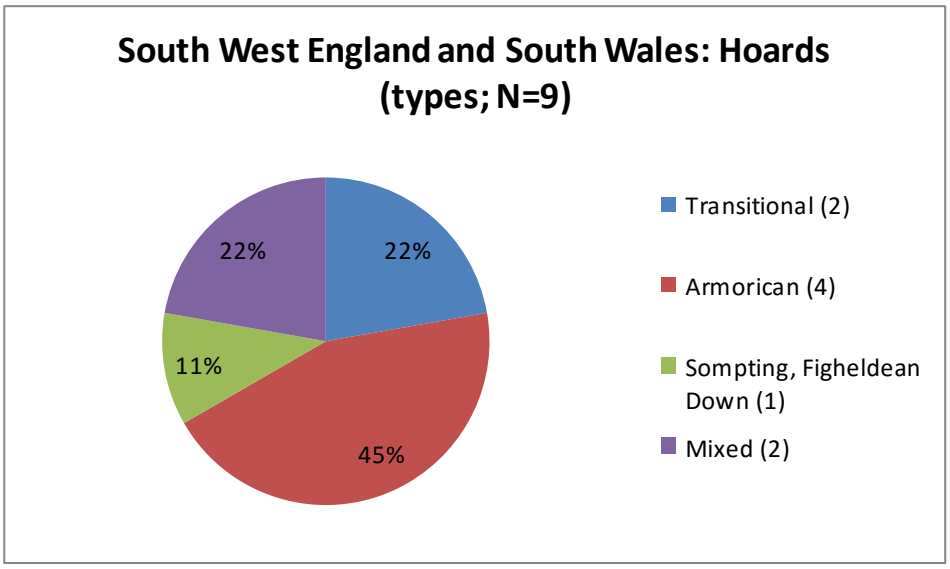


Figure 7.25: South West: Hoards (axe types; N=9)

Armorican axes originated in Brittany in North West France where thousands of them were found in hoards containing up to 4000 axes (e.g. Maure-de-Bretagne). Cornwall's geographical proximity to Brittany resulted in many Armorican axes crossing the Channel into South West England where they were deposited in smaller axe hoards. There are single finds dotted across South West England and the Vale of Glamorgan, but except for Cornwall the only other areas renowned for producing hoards of Armorican axes are Hampshire and the Isle of Wight (fig. 7.12).

There is only one axe hoard containing Sompting axes in the South West: this hoard was found on a cliff overlooking Mylor Creek (Cornwall, nos. 147-179, Plates 15-21) and contained 33 Sompting axes of Figheldean Down variant (including some South Welsh hybrids) which were all deposited, blade down, in an earthenware pot (Bruns and Needham 2008, 50-52). The discovery of this lone Sompting axe hoard from the South West raises some questions about the validity of the Figheldean Down variant and its distribution in Southern and South Western England. The only other hoard of Sompting type, Figheldean Down variant axes comes from Figheldean Down itself (Wiltshire, nos. 1029-1050) and there are only three provenanced single finds of Figheldean Down axes, with only one of them found in the South West (no. 965: Ham Hill, Somerset; nos. 669 and 992: Old Kent Rd, London and Kingston-on-Thames, Surrey; Plates 31, 63 and 71).

Even though Sompting axes are rare in the South West, the remote location of the hoard from Mylor may be explained with the close typological and geographical relationship of Sompting type, Figheldean Down variant axes and Armorican axes. Pure axe hoards including axes of one of each type (never combined) were predominately found in Hampshire in the South and in Cornwall in the South West. Both axe types share certain characteristics such as their size, weight, long, slender bodies, parallel sides, extremely narrow, unsharpened blades and their square or sub-rectangular mouth mouldings. Armorican axes have a high lead content and are considered to have been ingots or bullion in a pre-monetary society (Pearce 1983; Briard 1965; 1995; 2001). Figheldean Down axes also compare well with Armorican axes in metallurgy (though their alloy was high in tin rather than lead) and post-casting treatment. Thus, their metallurgy, distribution and deposition patterns indicate that they may have fulfilled a similar role as ingot or bullion.

Smaller assemblages containing Armorican axes were found in South Wales, at Llanmaes (Glamorgan: nos. 1406+1407) and Tintern (Monmouthshire: 1333+1334). While Tintern is a small hoard of only two Armorican axes, Llanmaes appears to be another midden or feasting site where Armorican axes were found in association with Sompting type axes, metal vessels, swan’s neck

pins and a great number of animal bones (Gwilt and Lodwick 2004; 2005; 2009).

The hoards from Llyn Fawr and Cardiff II (Glamorgan, nos. 1292-1293 and 1294-1299, Plates 119-130, fig 7.29) are the only two Early Iron Age hoards from South Wales. They are both mixed hoards with a very similar range of objects: socketed axes, socketed sickles, leather-working knives and horse or cart fittings. While the hoard from Cardiff II was deposited on a floodplain of the rivers Taff and Ely, the hoard from Llyn Fawr was deposited in a lake nearly 400 feet above sea level. It also includes two large cauldrons which may have served as container for the metalwork (Crawford and Wheeler 1921, 133-140; Fox and Hyde 1939, 369-404). While at Cardiff, all metalwork was made from copper alloy, Llyn Fawr included three iron objects (a socketed sickle, a spearhead and the upper part of the blade and hilt of an iron Mindelheim sword). The socketed sickle is an almost exact copy of the two bronze specimens in the hoard and it is the only socketed sickle made from wrought iron from the British Isles (Fox 1939, nos. 20-22). Even though there were no iron socketed axes amongst the finds from Llyn Fawr, three specimens were found by metal-detectorists at the nearby site of Penllyn Moor (nos. 1328-1330, Plate 131), a well-known deposition site for Bronze Age metalwork.

Sompting type axes are rare in South Wales: the only large Sompting axes found here are of the Cardiff II variant and they were probably not locally made, suggested by their main distribution is in the Midlands, the southern tip of North West England and in East Anglia (Cardiff II, no. 1293; Llyn Fawr, nos. 1294+8).

There are only two hoards of transitional character from the South West and South Wales: one from St Mellon's (Glamorgan, nos. 1300-1327) and the other from near Bristol (King's Weston Down, nos. 54-73). While the hoard from St Mellon's contains only South Welsh axes it is noteworthy that several of the axes were made from the same mould template which an unusual feature in Late Bronze Age hoards, but common in Early Iron Age hoards (Stanton 1984). The object types found at Kings Weston Down on the other hand are best compared to Early Iron Age metalwork but the high percentage of object fragmentation in this hoard resembles Late Bronze Age hoards rather than Early Iron Age hoards.

7.5.2. South West England and South Wales: Single Finds

There are only 29 single or unassociated finds of Early Iron Age socketed axes from the South Western region.

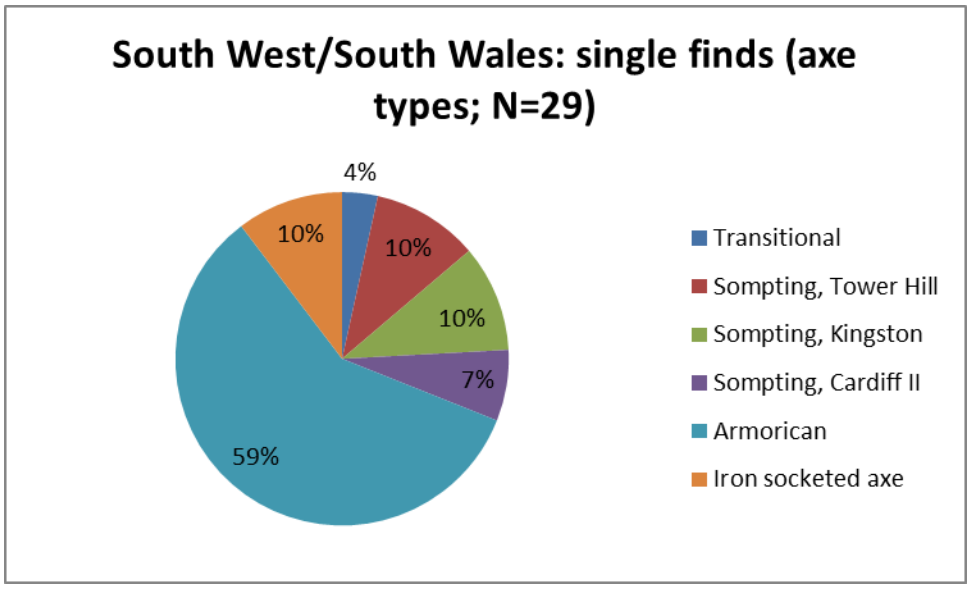


Figure 7.26: South West England and South Wales: single finds (axe types), N=29

Generally, the percentages of the individual axe types mirror those of axes in hoards (fig. 7.26). There are only few Sompting axes and more than half of the corpus is made up of Armorican axes (59% = 17 specimens), most of which were found in Cornwall and the Vale of Glamorgan. More specifically, most Armorican axes were found in south west Cornwall between Truro, Penzance and Falmouth, except no. 189 which was discovered near ancient monuments at Penquite (Anon 1919-20, 449).

In Devon, Armorican axes are prevalent, too, and there are possible Sompting axes from Chagford, Cullompton and Lovehayne (nos. 204-205, 208). Early Iron Age axes were associated with other Early Iron Age metalwork on the small midden site close to the promontory fort of Mountbatten (Plymouth) which may be a site that is comparable to the recently excavated midden or feasting site at Llanmaes (Vale of Glamorgan). The site of Mountbatten itself has been much disturbed and most of the metalwork finds come from the midden nearby. Amongst the finds are fragments of socketed axes as well as cauldron fragments, pins, brooches and several items of Late Bronze Age metalwork which suggest that this site was of some significance in the Late Bronze Age

and Early Iron Age (Cunliffe 1988; Gerloff 2010, 222, no. 65). A trilobite arrowhead, two 'Atlantic' *Fusszier* brooches and fragments of a B2 cauldron suggest that the site had regional connections as well as contacts further afield (Hawkes and Hull 1987, 51-2, nos. 3984 and 3985; O'Connor 1980, 250, List 237, no. 1; Cunliffe 1988; Gerloff 2010, 222, no. 65).

The midden sites at Mountbatten and Llanmaes were of similar character (nos. 1405-1407ff). Both sites yielded Armorican axes as well as axes of a small Tower Hill variant of the Sompting type in association with Early Iron Age pins, bracelets, vessel fragments, horse harness, pottery and a great amount of animal bones which all suggest that activities such as food preparation or feasting took place at both sites (Pearce 1983, 76; Cunliffe 1988; Lodwick and Gwilt 2004, 77).

7.5.3. South West England and South Wales: Contexts

In terms of contexts, this research shows that for the deposition of Early Iron Age hoards in the South West and South Wales, no single context was preferred, although there is a slight tendency towards wet contexts or contexts near or in water. However, due to Cornwall's long coastal line and Glamorgan's general proximity to the sea a predominantly coastal distribution of Early Iron Age is not surprising.

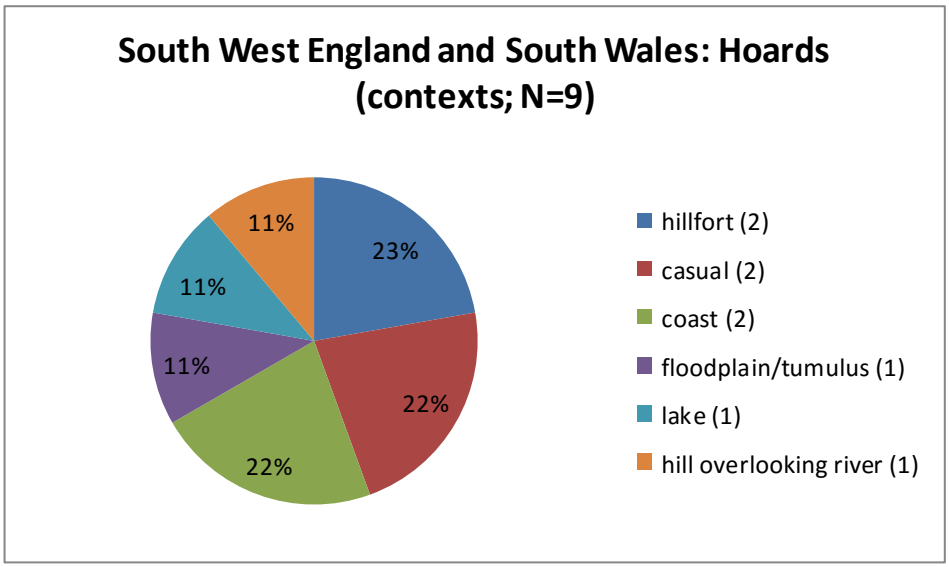


Figure 7.27: South West England/South Wales: hoards (contexts), N=29

Single finds were discovered in similar contexts to hoards (figs. 7.27+7.28). Over a quarter of finds (eight axes) were discovered near the coast which is nearly the same percentage as for Early Iron Age hoards in the South West and is equally unsurprising given the geographical location of Cornwall and the Vale of Glamorgan.

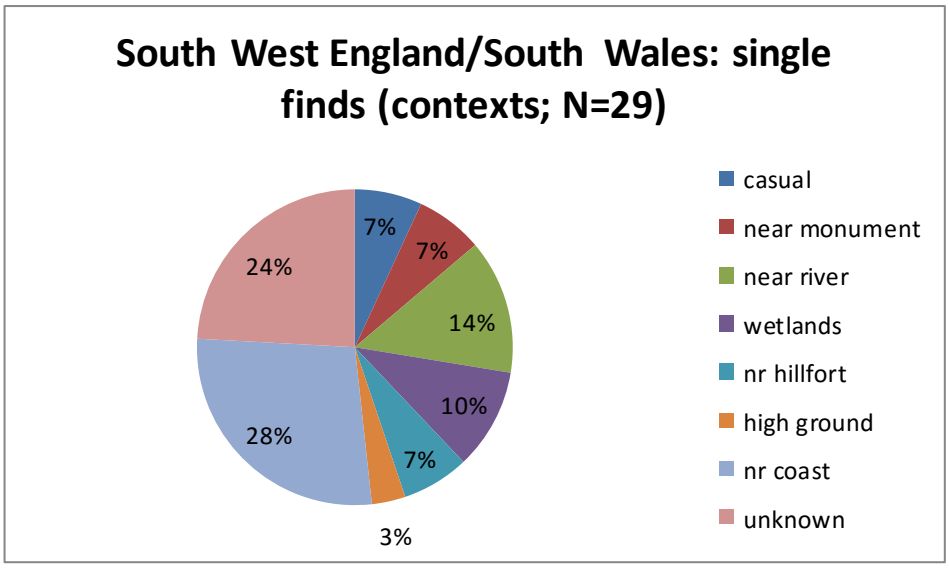


Figure 7.28: South West/ England South Wales: single finds (contexts), N=29

Seven axes have no exact findspot and for four of them we only have a record of the county they were found in, that is Cornwall or Somerset (nos. 190-192; 968). The remaining 14 socketed axes come from a wide range of contexts and they really only share the general trend that most of them were found on the Northern side of the Bristol Channel in the Vale of Glamorgan, the Severn estuary and the south coast. There are no finds from South West Wales or the northern coast of Cornwall, Devon or Somerset.

7.5.4. South West England and South Wales: Discussion

Even though South West England and South Wales are considered here as one region, they display certain regional variations, similar to the variations observed in the South which could be divided into three smaller regions with each region defined by an axe type and/or certain depositional practices. While axes and hoards in the furthest South West show affinities with North Western France (especially through Armorican axes and pure axe hoards of Armorican

axes and Sompting type axes of the Figheldean Down variant) South Wales is defined by mixed hoards, early iron artefacts and objects indicating contact with the Brabant area of Belgium.

Figure 7.29: Cardiff II/Leckwith Hoard (Glamorgan, nos. 1292-1293)

In terms of metalwork and overall number of significant sites, the Vale of Glamorgan is the undisputed focus of the Earliest Iron Age in Wales: Glamorgan produced two major Early Iron Age hoards (Llyn Fawr and Cardiff II), three iron socketed axes (Penllyn Moor, nos. 1328-1330) and it is also the location of the site of Llanmaes, a ritual feasting or midden site that produced Armorican axes, a small Tower Hill axe and several axe fragments (nos. 1405-

1407) associated with the midden material. Early Iron Age metalwork is scarce in other parts of Wales.

Lynch and Davies suggested that the Llyn Fawr phase was associated with the appearance of new weapons and a renewed eastern metallurgical links (Lynch and Davies 2000, 183; Northover 1982, 67). Evidence for this revived connection with Continental Europe can be found in the hoard from Llyn Fawr which included an iron spearhead, bronze cheek pieces and a yoke mount for which there are only parallels in the hoard from Alsenborn (Rheinland-Pfalz, Germany; Mariën 1958, fig. 18, no. 209; Cowen 1967, fig. 6, 4) and in the cemetery at Court-St-Étienne in Brabant, Belgium (Tombelle 3, Tombelle A and Tombelle Z) (Mariën 1958, 24-25, 84 and 247, figs. 3 and 12). The hoard from Llyn Fawr hoard also included six rib-and-pellet decorated axes (nos.1294-99), two of which are of Sompting type, Cardiff II variant, and the remaining four are of Transitional type. One of the axes was in all likelihood intentionally damaged (no. 1296, Plates 123-124) which is rare amongst the corpus of Early Iron Age axes (only 8 single finds and 9 axes from hoard contexts showed signs for intentional damage). This transitional axe displays a row of deep nicks along the cutting edge of its blade. The angle of impact and shape of the cuts suggests that they were inflicted with another bladed weapon, possibly another axe. None of the others show as much damage as this one, but with this damage to its blade, the axe was certainly rendered useless before deposition.

The early production of iron copies of Late Bronze Age socketed tools in South Wales and their integration in a metalwork hoard strongly suggests that the area was embracing the new iron technology. Geographically, South Wales is linked with the other areas of early iron artefact production along the Thames such as Wiltshire and the Greater London area. The Mindelheim sword and the iron spearhead from Llyn Fawr were most certainly imports to the area and suggest a link with Continental Europe at the time, arguably via the Thames Basin. Finds of Armorican axes (e.g. from Chapel Hill (Tintern, Monmouthshire), Newton Nottage and Llanmaes (Glamorgan) which are also concentrated of this area of Wales suggest an equally strong connection with the communities in Cornwall and Brittany.

The closeness of South Wales and South West England is not only attested by the bronze metalwork of the Ewart Park and Llyn Fawr periods, but is also suggested by settlement evidence. The rise of hilltop sites and more strongly fortified lowland settlements which are characteristic for the Early Iron Age in the Welsh Marches and further south were mirrored by a similar phenomenon in South West England. Pearce (1983, 113) argues that within the wide range of late prehistoric enclosures, hillforts seem to constitute a unique group, even allowing for their diverse origins, change of use, and overlap of functions with other kinds of enclosed sites. It has been shown that the origins of most of these hillfort settlements were not in the Early Iron Age, but in the Late Bronze Age.

Pearce argues that in the Late Bronze Age a drastic change in metalwork production occurred: market forces enabled the south-eastern smiths to turn out vast quantities of new designs, especially swords, tools and the socketed axes which replaced palstaves (Pearce 1981, 125). Evidence for this comes from sites such as Mount Batten (Plymouth, Devon) and Ham Hill (Somerset) (Pearce 1981, 76). At the same time, Armorican axes began to spill into Southern Britain and since their main production centres were located in Brittany, the proposed routes of import ran via Southern and South West England (Briard 1965; Briard 2001, 125-130).

However, compared to the number of bronzes from earlier metalwork assemblages and hoards and single finds of Armorican axes, little actual Llyn Fawr metalwork has been recovered from the South West. Similar to the situation in South Wales, the bronzes come from a few exceptional sites which all seemed to have been able to maintain some kind of connection to Central and Atlantic Europe during the Earliest Iron Age (Ham Hill (Somerset), Mountbatten (Devon) and Carn Brea (Cornwall) (Pearce 1981, 126). Allegedly, there was a large, now lost, hoard of Armorican axes from Carn Brea and Ham Hill produced a mould for Sompting axes (no. 1409), while Mountbatten's corpus of metalwork includes Sompting and Armorican type axes (nos. 209-210), pins, brooches, knobbed bracelets as well as repair sheets for metal vessels. Pearce (1981, 126-128) concludes that ingots such as Armorican axes which were imported into Southern Britain are a sign for the on-going trade and

exchange between the peoples on both sides of the Channel. She argues further that this strong trading connection probably continued in the succeeding periods and resulted in the well-known tin trade between South West England and the Mediterranean via the Armorican coast with prolific sites such as Mountbatten (Plymouth, Devon) being important stop-overs on the way.

Generally speaking, almost all Llyn Fawr assemblages from the South West consist of Armorican axes or are characterised by ornaments like pins and brooches; large axe hoards of Sompting type axes which are known from other areas in Central, Southern and Eastern England are unknown, except for the hoard from Mylor (Cornwall). This situation resembles that of the Late Bronze Age and the Late Bronze Age/Early Iron Age transitional period when metalwork was deposited in large hoards elsewhere, while deposition practices like this remained almost unknown in South West England. It has been suggested that the reason for this lack of large bronze metalwork deposits at the end of the Bronze Age and in the beginning of the Early Iron Age was the South West's proximity to the ores most needed for the production of bronze (*pers. comm.* P. Northover; Pearce 1983, 253-256; O'Connor 2007, 64). The communities in South East and Eastern England were furthest away from the ores and so they would have the greatest need to hoard bronzes for recycling, while those communities that lived close to the mining sites would have less reason to hoard scrap bronze.

In summary it can be said that South West England and South Wales as a region are characterised by the lack of great number of typical Early Iron Age axe types such as Sompting axes. The corpus of axes from the South West and South Wales are dominated by Armorican axes and only few other types are found – and those mainly in hoards rather than as single finds. Unlike Southern England and East Anglia, the South West did not develop a regional Early Iron Age axe type. There are, however, two obvious foci of metalwork deposition: one in Cornwall's south west peninsula and the other in the Vale of Glamorgan.

While the Cornish single finds and assemblages are dominated by Armorican axes, there are only three Armorican axes from the Vale of Glamorgan, one from Newton Nottage (no. 1331, Plate 131) and two from the midden or feasting site at Llanmaes (nos. 1406-1407, Plates 150-152). There is also a small hoard

of two Armorican axes from Tintern (Monmouthshire, nos. 1333-1334, Plates 132-133) but generally, assemblages from South Wales are characterised by mixed hoards with Continental imports such as Llyn Fawr and Cardiff II as well as the mixed assemblage of the feasting or midden site at Llanmaes which produced Armorican axes as well as a small Sompting type axe (no. 1405), ring-headed and swan's neck pins, horse-related fittings, fragments of four cauldrons, fragments of smaller, ring-handed bowls, a ladle and small tools made from both bronze and iron (Lodwick and Gwilt 2004, 77; Lodwick, Gwilt and Deacon 2006, 42-43; Lodwick and Gwilt 2009, 30-32). The condition of the artefacts and their contexts at Llanmaes suggest a very different kind of metalwork deposition to that of Llyn Fawr and Cardiff II hoards. Extremely high phosphate readings at Llanmaes, demonstrate the presence of large numbers of people and animals, and the wide range of feasting-related bronze metalwork suggest that Llanmaes was a site used for meeting, slaughtering, feasting and possible destruction and deposition or bronze as well as iron metalwork (Lodwick and Gwilt 2009, 30). There is no comparable site from South West England, where the corpus of Early Iron Age metalwork is made up almost entirely of Armorican axes, the only exception being the hoard of Sompting type, Figheldean Down variant axes found at Mylor (Cornwall, nos. 147-179, Plates 15-21).

7.6. The Thames Valley

The Thames Valley area covers the counties of Greater London, Berkshire, Buckinghamshire, Oxfordshire and Gloucestershire (figs. 7.30+7.31). There are 72 Early Iron Age axes from the area (27 from hoards and 45 single finds), with over half of the single finds coming from the Thames in Greater London and Surrey (33 specimens). However, the Thames Valley region provided only three hoards: from Kingston (Surrey: nos. 988-991), Tower Hill and Compton Beauchamp (Oxfordshire: nos. 932-954; 954).

	Number of axes in hoards	Number of single finds
Greater London	-	20
Berkshire	-	1
Buckinghamshire	-	2
Oxfordshire	23	8
Gloucestershire	-	1
Surrey	4	7
Unknown 'Thames'	-	6

Figure 7.30: Thames Valley: numbers of Early Iron Age socketed axes (hoards and single finds)

While the hoard form Kingston is a pure axe hoard containing four axes of Sompting type, the hoards from Oxfordshire are both axe-dominated hoards because they also included items of other metalwork types (fig. 7.31).

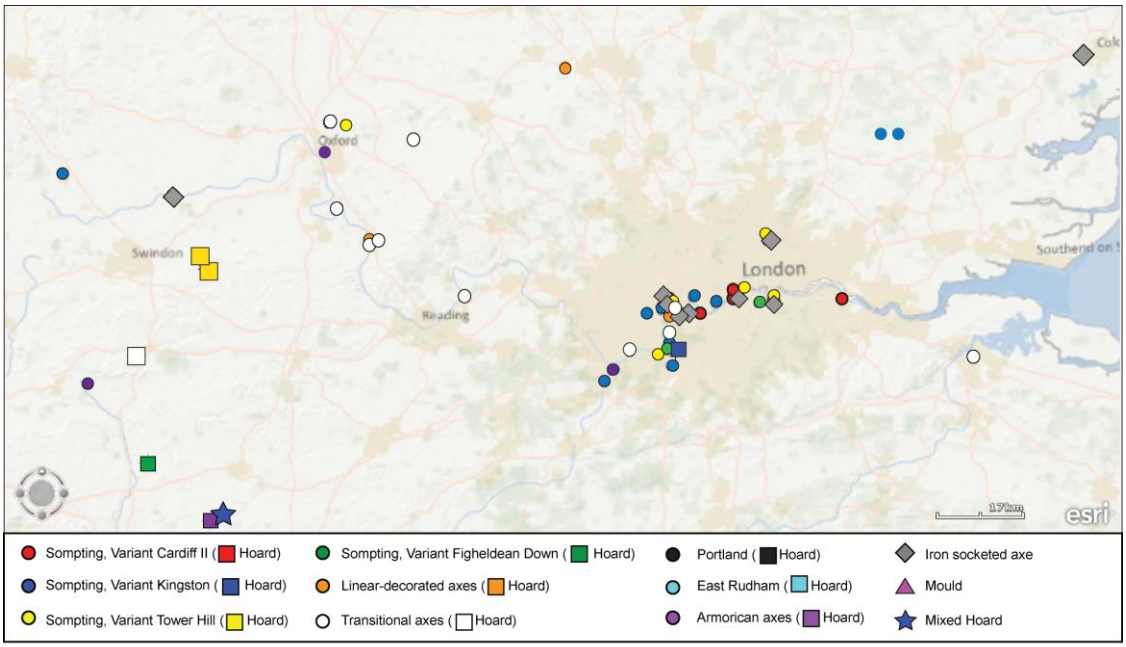


Figure 7.31: Distribution of Early Iron Age socketed axes (hoards and single finds) in the Thames Valley (see close-up of London area, fig. 7.33)

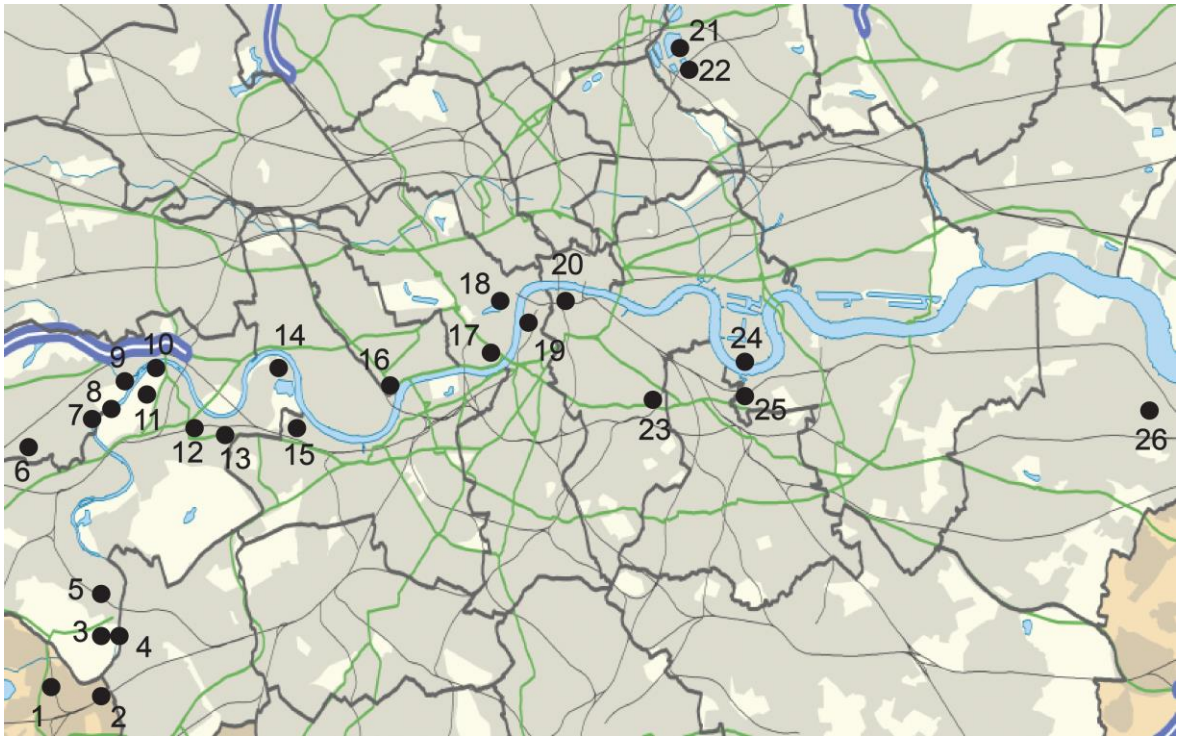


Figure 7.32: Location of Early Iron Age socketed axes (single finds and hoards) in Central London

1 R Thames at Thames Ditton (no. 993)
2 R Thames at Surbiton (no. 997)
3 R Thames at Kingston-on-Thames (no. 992)
4 R Thames at Kingston-on-Thames (nos. 988-991)
5 R Thames near Kingston-on-Thames (no. 994)
6 Hounslow (?) (no. 1337)
7 R Thames at Syon Reach (no. 677)
8 Between Isleworth and Brentford (no. 674)
9 R Thames at Kew (no. 678)
10 R Thames at Kew (no. 670)
11 R Thames at Old England, Brentford (no. 673)
12 R Thames at Mortlake (no. 679)
13 R Thames at Mortlake (no. 680)
14 R Thames at Hammersmith (no. 676)
15 R Thames at Putney (no. 681)
16 R Thames at Chelsea (no. 675)
17 R Thames at Millbank (no. 682)
18 R Thames 'London' (no. 684)
19 R Thames, London (no. 685)
20 R Thames, London (no. 1343)
21 Lea Marshes, Walthamstow (no. 666)
22 Walthamstow (no. 667)
23 near Old Kent Rd, London (no. 669)
24 R Thames opp. Greenwich (no. 1341)
25 Thames St, Greenwich (no. 683)
26 R Thames, near Erith (no. 806)

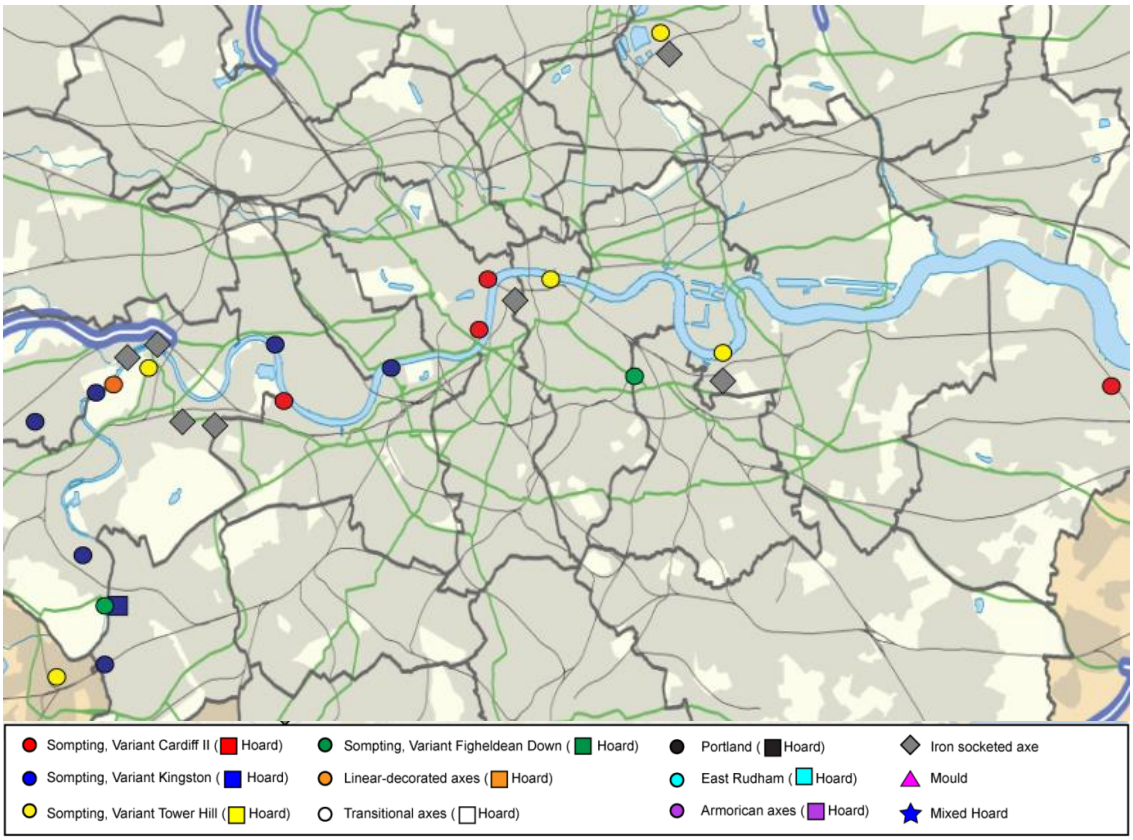


Figure 7.33: Distribution of Early Iron Age socketed axes (hoards and single finds) in Central London

7.6.1. The Thames Valley: Hoards

There are only three hoards containing Early Iron Age socketed axes from this region: the hoards from Kingston (Surrey: nos. 988-991, Plates 69-70), Tower Hill and Compton Beauchamp (Oxfordshire, nos. 932-953; 954; Plates 49-61). We do not know much about the small hoard from Compton Beauchamp and it is, so far, unpublished. It was recorded and drawn at Salisbury Museum with a note that the axe and casting sprue went back into private possession after recording.

The three hoards from the Thames Valley region can be classified as one axe hoard (Kingston, Surrey) and two axe-dominated hoards (Tower Hill and Compton Beauchamp) because the hoard from Tower Hill also included several fragments of bracelets and other ornaments, metal-working debris and a pin, and at Compton Beauchamp a socketed axe was found with a single piece of casting sprue. The findspot of the axe and sprue or runner fragment at Compton Beauchamp is marked as being c. 3km away from the findspot of the Tower Hill

hoard and both shape and condition of the single axe are extremely similar to the shape and condition of the 22 axes from Tower Hill. The axes from Tower Hill are plain and were deposited in almost as-cast condition. They were unworked except for some hammer marks on the blade close to the cutting edge. The marks suggest that the final shaping process had started but was not completed before deposition. The axe from Compton Beauchamp was deposited in the same condition: here, too, dents of hammer marks are clearly visible on the lower part of the axe, close to the cutting edge. However, like the hoard, the axe is in private possession and it was not possible to compare the axes directly.

The association of unfinished socketed axes and items of casting sprue and broken-up metalwork suggest local axe production, possibly not far from the site of deposition, but during a magnetometer survey of the site no evidence for metal-working could be found nearby. The lack of evidence in the immediate vicinity of the hoard findspot suggests that metal-working must have been either extremely short-lived if carried out on-site, or, if local, it must have happened much further away from the hoard findspot (Linford 1999).

In contrast, the hoard found at Kingston-upon-Thames, Surrey (nos. 988-991) would be a much more typical axe hoard with no other associated finds except a possible gold ring which came into the British Museum at the same time (Huth 1997, 274). However, this is probably an unrelated find because gold artefacts or fragments thereof are very rarely found in association with Early Iron Age metalwork. The only exception is a recently discovered Early Iron Age assemblage of metalworking debris from Wiltshire which included a fragment of gold but no socketed axes (PAS ID: WILT-A74356; Treasure No. 2011T793). The hoard from Kingston consists of four Sompting axes: one plain axe of Tower Hill variant and three decorated axes of Kingston variant. It is the only hoard from the Thames area in London and the British Museum Register entry reads that all four axes were bought from the same dealer in 1849. At the time, the dealer stated that all of them came from the Thames at Kingston, but the register entry does not elaborate on whether or not the axes were found together. The four axes have always been treated as a hoard, but a great number of Late Bronze Age and Early Iron Age socketed axes (and other

metalwork) have been found during dredging work in the Thames and the four axes may not have been found in association at all. It is therefore likely that they were only grouped together because they shared the same findspot and looked quite similar. The Thames as a findspot is as inexact as any other river or a lake: associations of objects dredged from it cannot be taken for granted. The vague entry in the British Museum Register and the absence of other Early Iron Age hoards with socketed axes from Greater London suggests that the four axes from Kingston-upon-Thames were deposited as single objects. They could have easily been deposited on four separate occasions by four separate people rather than by just one person in a single event. Furthermore, if the axes were deposited in one single event there is nothing to say that there were not more axes (or other objects) deposited with them which may have been dredged from the Thames on other occasions or else, have not yet been found. York argues that our corpus of metalwork recovered from the Thames is probably only a fraction of what was originally deposited (York 2002, 79). In addition, the mode and time of deposition is impossible to divulge. York's research suggests that amongst tools deposited in the Thames, axes were the most numerous (York 2002, 87). However, it is impossible to tell which axes were deposited singly and which were deposited in a group with others.

7.6.2. The Thames Valley: Single Finds

There are 45 single finds of Early Iron Age socketed axes from the Thames Valley and nearly three quarters of them come from the Greater London area. Eleven were found further upstream in Berkshire, Buckinghamshire and Oxfordshire, and the limited variety is notable. Six of the axes found upstream were transitional axes while there are only three transitional axes from the Thames in London. There is a much greater variety of axe types amongst the larger corpus of axes from London. However, axes of Sompting type, Kingston and Tower Hill variants, transitional axes and iron socketed axes are prevalent in this area.

Single finds of socketed axes from the Thames were discovered whilst dredging, the building of new locks, bridges or riverside buildings, and it has been suggested that some of them may have eroded from Late Bronze

Age/Early Iron Age riverside settlements such as 'Old England' (Brentford, Greater London, nos. 673+674) and Wallingford (Oxfordshire, nos. 960-962) (Rainbow 1928, 174; Manning and Saunders 1972, 285; York 2002, 77-78). However, the great number of socketed axes from this comparatively small geographical area suggests that settlement erosion cannot be the sole interpretation for their deposition in the river. The map shows that the distribution patterns for each individual axe type are very similar. Except for single finds of transitional axes, all of them concentrate on a zone in Central London between Weybridge and Woolwich. Transitional axes were also found further upstream in Berkshire, Buckinghamshire and Oxfordshire (nos. 53, 75, 957, 958, 961, 962).

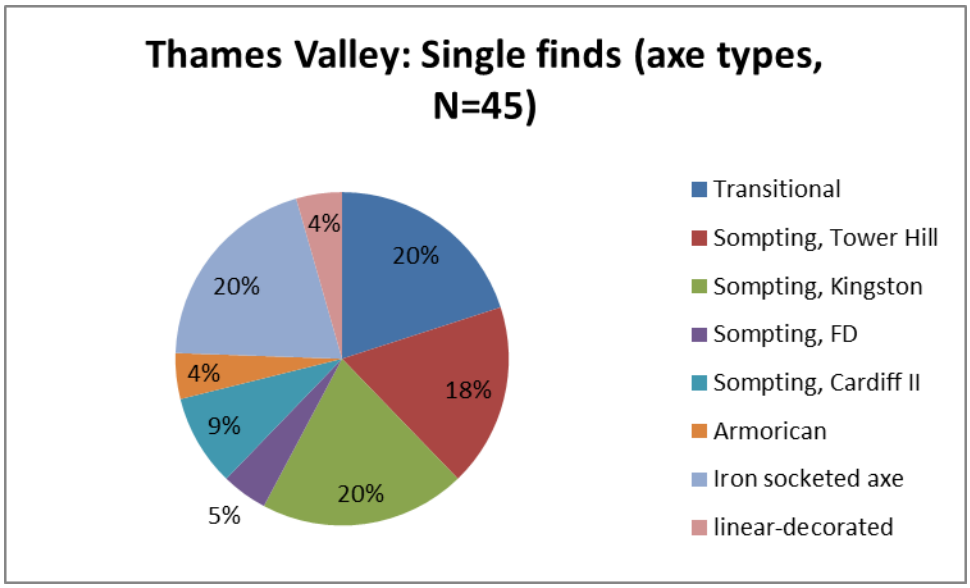


Figure 7.34: Thames Valley: single finds (axe types), N=45

While there are significantly more transitional axes from the western part of this region, there are eight iron socketed axes from London. With the ninth iron socketed axe from Buscot (Oxfordshire, no. 956) the iron socketed axes from this region make up nearly half of the entire corpus of iron socketed axes from Britain (fig. 7.34). The only other cluster of iron socketed axes can be found at the site of Penllyn Moor (Vale of Glamorgan, nos. 1328-1333) in Wales.

One interpretation of metalwork dredged from the Thames is settlement or hoard erosion which probably explains some but not all of the finds made at Wallingford (Oxfordshire, nos. 960-962) and Brentford (London, nos. 673+674)

(York 2002, 89-91). The settlement at Wallingford is a transitional Late Bronze Age-Early Iron Age settlement which produced Ewart Park metalwork and transitional pottery, but no conclusive Early Iron Age metalwork evidence (Thomas 1984, 9-19; Thomas et al. 1986, 174-200). Thomas argues that much of the metalwork dredged from the Thames at Wallingford was found over a kilometre away from the settlement site and he suggests that the items from the river were ancient losses during river-crossings or ritual deposits (Thomas 1984, 9, 17-18). However, the general Late Bronze Age and transitional character of the recovered axes and the pottery from Wallingford support the transitional date for the site. The settlement at Wallingford – and with it the practice of river deposition – was discontinued at the beginning of the Early Iron Age while the custom of metalwork deposition in the Thames continued further downstream in the Central London area.

7.6.3. The Thames Valley: Contexts

In terms of contexts, the number of river and wetlands finds from the area is staggering: 43 out of 45 finds come from rivers or the area immediately adjacent to a river, wetlands, a floodplain or a hill overlooking a river (fig. 7.35). Only two axes were not found in or near a wet context: the iron socketed axe from Maids Moreton (Buckinghamshire, no. 76) and the Sompting type, Tower Hill variant axe from Beckley (Oxfordshire, no. 955).

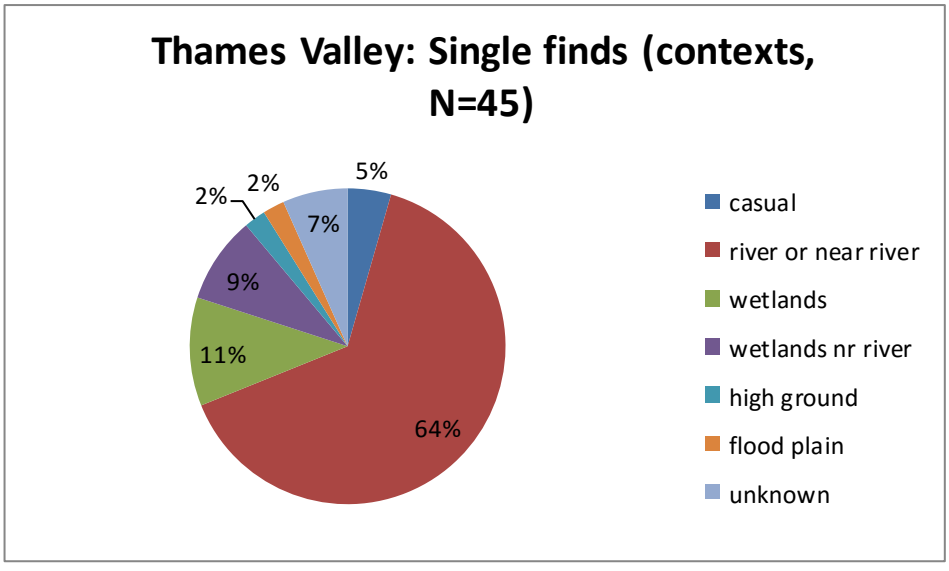


Figure 7.35: Thames Valley: single finds (contexts), N=45

The majority of socketed axes from the Thames Valley were discovered near a river or have come from the river itself. The largest river in this area – the Thames – was by far the most popular river for metalwork deposition (fig. 7.36).

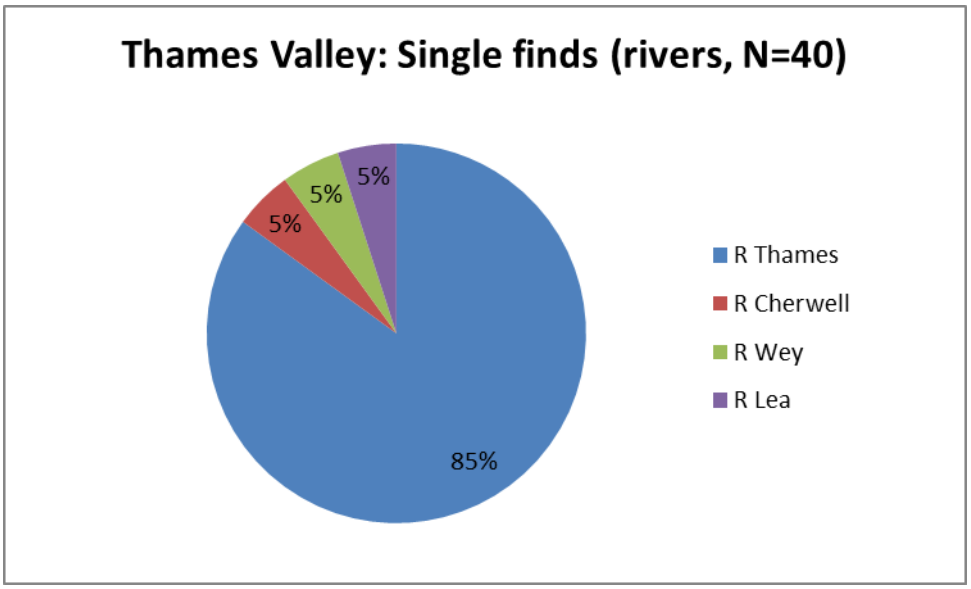


Figure 7.36: Thames Valley: single finds (rivers), N=40

34 socketed axes (85%) were dredged from the Thames and only six from its tributaries Cherwell (Oxfordshire), Wey and Lea (Greater London). Of course this discrepancy may have something to do with the amount of dredging and riverside construction being carried out alongside the individual rivers, but even so the difference should not be that dramatic unless the Thames did indeed have a different status from the other rivers in the Early Iron Age.

The main reason for why the Thames may have been chosen over its smaller tributaries for the deposition of Bronze Age and Early Iron Age metalwork lies perhaps in its size. York suggested that the Thames may have served as a natural boundary of two territories and repeated depositions of weapons and tools were a way of staking a claim to one's own territory, while Bradley argues that the deposition of weapons in the Thames may have been a statement about ownership and control (York 2002, 90; Bradley 1990, 139-140).

7.6.4. Thames Valley: Discussion

The main water feature of this region, the Thames, serves to this day as the gateway to England and is the main access into the centre of the country from the North Sea. Allen, Hey and Miles (1997, 115) see the Thames as having the potential to be a channel of communication, a barrier as well as a defence, but mainly as a political and cultural boundary. Whatever the Thames was for prehistoric communities living in its immediate vicinity, they certainly found an expression for some of their beliefs in the deposition practices applied to bronze and iron metalwork.

Late Bronze Age and Early Iron Age hoards are notably absent from the Thames Valley region. The only hoard in the London area is the questionable hoard from Kingston-upon-Thames (Surrey, nos. 988-991) which may well have been four single axes that were grouped together at the time of their entering the British Museum collections. The two hoards from Oxfordshire (Tower Hill and Compton Beauchamp, nos. 932-953+954) are certainly related and with the inclusion of casting sprue and broken-up pieces of metalwork they appear to be depositions of unfinished metalwork.

The Thames Valley is also the area with the greatest number of earliest iron finds that were not discovered in a settlement or hoard context. Out of twenty provenance iron socketed axes from Britain, nine were found in the Lower Thames region (no. 76: Maids Moreton, Buckinghamshire; nos. 667, 674, 678-680, 683, 685, 956: Greater London). Except for the iron axe from Maids Moreton (no. 76, Buckinghamshire) which is not securely dated (Kevin Leahy *pers. comm.*), and is a casual find, the others were discovered in or near wet contexts in locations reminiscent of Penllyn Moor (Vale of Glamorgan) in South Wales, where three iron socketed axes were found in close proximity in an area renowned for Bronze Age deposition.

There was a strong connection between the Thames Valley and South Wales in the Early Iron Age, which is perhaps best reflected in the comparatively large numbers of early iron artefacts found in both regions. The frequent occurrence of early iron finds (often exact copies of their bronze forerunners) strongly suggests that iron was worked and utilised in this area.

The high percentage of early iron socketed axes from the Thames Valley is remarkable, especially because it stands in stark contrast to the percentage of copper-alloy axes found: Nine iron socketed axes are nearly 50% of the entire corpus of British iron socketed axes, but out of a total of 1412 copper-alloy socketed axes from Britain, the Thames Valley produced only 68 specimens (5%).

While iron socketed axes are most common in the Thames Valley, a greater variety of early iron artefacts was found in Wiltshire and South Wales, with the tanged iron sickle and spearheads from Hindon and Melksham (Wiltshire) and the socketed sickle, sword hilt and spearhead from Llyn Fawr and the three socketed axes from Penllyn Moor (Vale of Glamorgan).

While much of the iron and bronze metalwork may have been deliberately deposited in the Thames, it is possible that some of the artefacts may have been lost during river crossings or eroded into the river from river-side settlements. The settlements at Wallingford (Oxfordshire) and Brentford ('Old England', London) are prime examples. The pile dwellings at Old England yielded numerous metal finds from the Thames foreshore and from the River Thames itself. From the site and the river come an enormous amount of pottery, Late Bronze Age weapons and tools, such as socketed axes, razors, tweezers, Late Bronze Age and Early Iron Age bronze phalerae, a knobbed sickle, tanged and socketed knives, a variety of bugle-shaped objects and a tongue-shaped chape, a bag-shaped chape and winged Hallstatt chape (Wheeler 1929, 20-33). Wallingford (Oxfordshire) is a very similar site which produced transitional pottery and as well as a large corpus of typical Late Bronze Age metalwork, e.g. a tanged chisel, fragments of a socketed sickle, spearhead fragments, an awl and many smaller bronze fragments in the occupation debris. However, unlike Brentford, there were no undeniably Early Iron Age artefacts from the settlement site or the river.

7.7. East Anglia

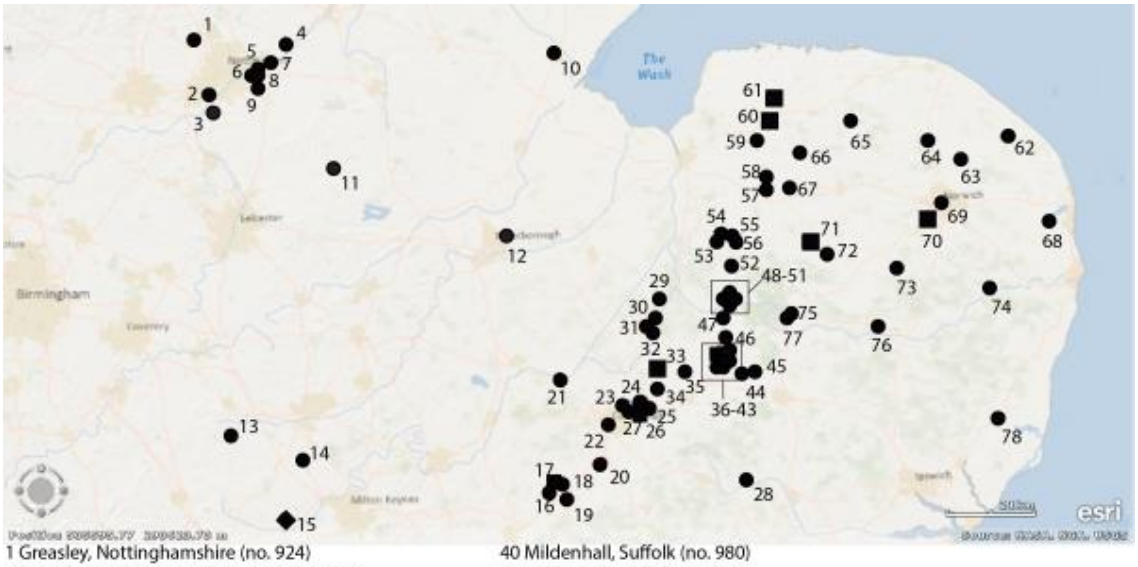
The region of East Anglia includes the counties of Bedfordshire, Cambridgeshire, Essex, Hertfordshire, Norfolk and Suffolk. East Anglia provided the greatest number of single finds of socketed axes (60 specimens) and the

second largest number of hoards (10). Most of the single finds come from Cambridgeshire, Norfolk and Suffolk and most of the hoards from Cambridgeshire and Norfolk (fig.7.37).

	Number of axes in hoards	**Number of single finds**
Bedfordshire	50+ (exact number unknown)	1
Cambridgeshire	6	17
Essex	15+ (exact number unknown)	1
Hertfordshire	-	1
Norfolk	54	25
Suffolk	2	15

Figure 7.37: Number of socketed axes (hoards and single finds) from East Anglia

Early Iron Age socketed axes were not evenly distributed throughout the region. Only a small number of single finds were discovered in the coastal area; most unassociated finds were found inland (figs. 7.38+7.39). There is a scatter of socketed axes in Norfolk, but most axes came from locations along the Fen edges in Norfolk, Suffolk and Cambridgeshire. No axes were found in the Fens themselves. The greatest concentration of finds is in the area around and to the north east of Cambridge and there is a smaller cluster of four finds further to the west in a slightly elevated area between Little Downham and Downham Market (nr. Ely, nos. 87+88; Fordham, no. 92; Ely District, no. 94). In the Late Bronze and Early Iron Age this elevated region was probably one of the Fen islands.



1 Greasley, Nottinghamshire (no. 924)
2 Attenborough, Nottinghamshire (no. 922)
3 Gotham, Nottinghamshire (no. 923)
4 Hoveringham, Nottinghamshire (no. 929)
5 Holme Pierrepont, Nottinghamshire (no. 928)
6 Holme Pierrepont, Nottinghamshire (no. 925)
7 Shelford, Nottinghamshire (no. 930)
8 Holme Pierrepont, Nottinghamshire (no. 926)
9 Holme Pierrepont, Nottinghamshire (no. 927)
10 Boston, Lincolnshire (no. 838)
11 Jericho Lodge, Leicestershire (no. 827)
12 Newark, Peterborough (no. 97)
13 Preston Capes, Northamptonshire (no. 1393)
14 Stoke Bruerne, Northamptonshire (no. 921)
15 Maids Moreton, Buckinghamshire (no. 76)
16 Litlington, Cambridgeshire (no. 99)
17 Bassingbourn, Cambridgeshire (nos. 77-78)
18 Bassingbourn, Cambridgeshire (no. 83)
19 Royston, Hertfordshire (no. 774b)
20 Newton, Cambridgeshire (no. 96)
21 Fen Drayton, Cambridgeshire (no. 91)
22 Cambridge Area, Cambridgeshire (no. 86)
23 Horningsea, Cambridgeshire (no. 93)
24 Lode, Cambridgeshire (no. 84)
25 Lode, Cambridgeshire (no. 85)
26 Quy Fen, Cambridgeshire (nos. 79-80)
27 Fen Ditton, Cambridgeshire (no. 90)
28 Clare, Suffolk (no. 974)
29 Littleport Fen, Cambridgeshire (no. 95)
30 Fens near Ely, Cambridgeshire (no. 88)
31 Ely, Cambridgeshire (no. 87)
32 Ely District, Cambridgeshire (no. 94)
33 Wicken Fen, Cambridgeshire (nos. 81-82)
34 Reach, Cambridgeshire (no. 98)
35 Fordham, Cambridgeshire (no. 92)
36 Mildenhall, Suffolk (nos. 971-972)
37 Mildenhall, Suffolk CII (no. 979)
38 Mildenhall, Suffolk CII (no. 982)
39 Mildenhall, Suffolk CII (no. 984)
40 Mildenhall, Suffolk (no. 980)
41 Mildenhall, Suffolk (no. 981)
42 Mildenhall, Suffolk (no. 983)
43 Mildenhall, Suffolk (no. 985)
44 Cavenham, Suffoilk (no. 973)
45 Lackford, Suffolk (no. 977)
46 Eriswell, Suffolk (no. 975)
47 Lakenheath, Suffolk (no. 978)
48 Wilton Bridge, Norfolk (no. 905)
49 Hockwold cum Wilton, Norfolk (no. 903)
50 Blackdyke, Norfolk (no. 896)
51 Hockwold cum Wilton, Norfolk (no. 904)
52 Methwold, Norfolk
53 Whittington, Norfolk
54 Boughton, Norfolk
55 Oxborough, Norfolk
56 Oxborough, Norfolk
57 South Acre, Norfolk
58 Castle Acre, Norfolk
59 Little Massingham, Norfolk
60 East Rudham, Norfolk
61 Syderstone, Norfolk
62 Stalham, Norfolk
63 Horstead, Norfolk
64 Marsham, Norfolk
65 Woodnorthon, Norfolk
66 Tittleshall, Norfolk
67 Little Dunham, Norfolk
68 Burgh Castle, Norfolk
69 London St, Norwich, Norfolk
70 Cringleford, Norfolk
71 Watton, Norfolk
72 Caston, Norfolk
73 Bunwell, Norfolk
74 Outney Common, Norfolk
75 Thetford, Norfolk
76 Bressingham, Norfolk
77 Thetford, Norfolk
78 Farnham, Suffolk

Figure 7.38: Location of Early Iron Age socketed axes (hoards and single finds) in East Anglia

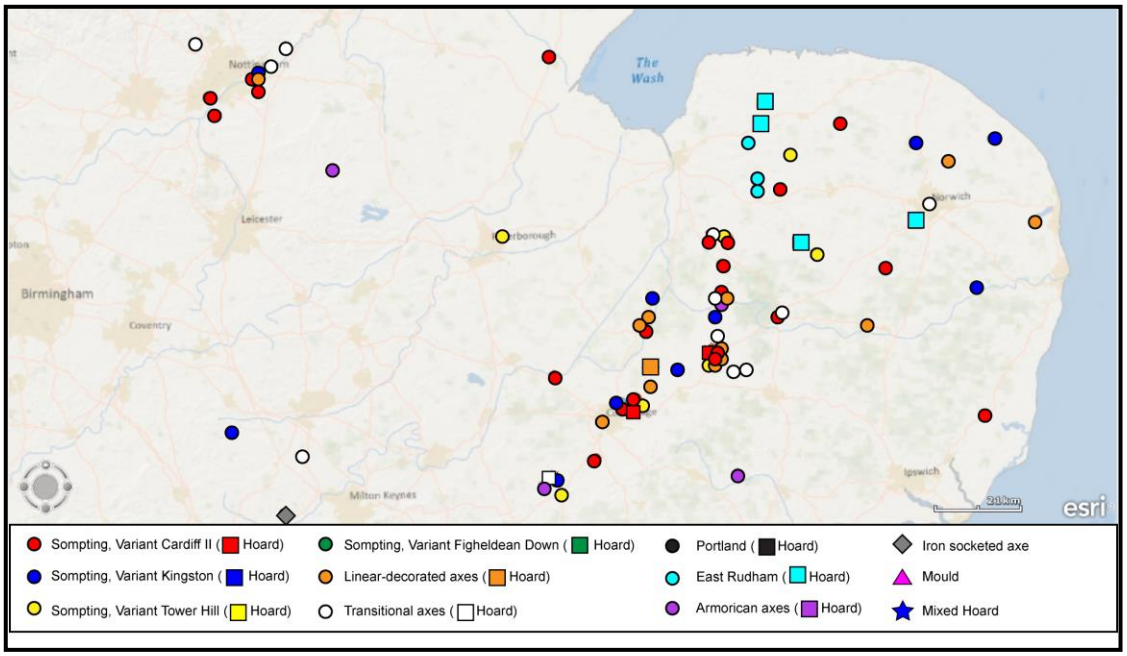


Figure 7.39: Distribution of Early Iron Age socketed axes in East England

Over half of the corpus of single finds from East Anglia is made up of linear-decorated axes and Sompting type axes of the Cardiff II variant, neither of which features much at all in Southern England or the Thames Valley. The only two hoards containing Sompting axes are also made up of Variant Cardiff II axes (Quy Fen, Cambridgeshire, nos. 79-80; West Row, Mildenhall, Suffolk, nos. 971+972).

Norfolk produced four hoards, all of which contained only East Rudham axes (Cringleford, nos. 842-844; East Rudham, nos. 845-886; Syderstone, nos. 887-888; Watton, nos. 889-895). These axes are typologically related to Portland, Blandford and Hindon type axes from Southern England. Socketed axes of all four types share the thin casting, brittleness and a very shiny silvery surface.

7.7.1. East Anglia: Hoards

There are ten Early Iron Age hoards from East Anglia, which is the second largest concentration of Early Iron Age hoards; only the South produced more hoards (19). There are three possible Late Bronze Age-Early Iron Age transitional hoards, one hoard of linear-decorated axes, two hoards containing axes of Sompting type, Cardiff II variant and four hoards consisting East Rudham type axes. Each hoard contains axes of only one type and there are no mixed or multi-period hoards from East Anglia (fig. 7.40).

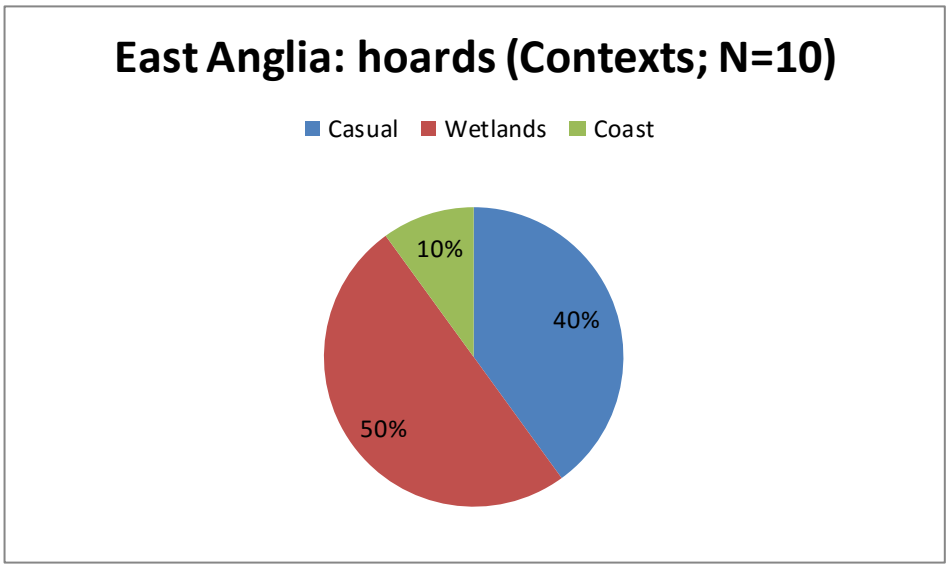


Figure 7.40: East Anglia: hoards (contexts), N=10

One of the transitional hoards was found in Bedfordshire, another in Essex (Wymington, nos. 1-51, and Dovercourt, nos. 650-664). They contain axes of the preceding Ewart Park metalwork assemblage but the character of these hoards appears later. Unlike Late Bronze Age hoards, which are normally made up of broken-up objects and include artefacts of a wide artefact range, these two hoards contain only socketed axes. As transitional hoards they can perhaps be viewed as precursors to Early Iron Age axe hoards. The third transitional hoard comes from Bassingbourn (Cambridgeshire, nos. 77-78, Plate 5). It is a small hoard of only two axes, which are both of Late Bronze Age shape, even though one is a very slender type with parallel sides and narrow blade (no. 77). This axe also bears a (for a Late Bronze Age axe) unusual ornament on both faces: a pellet just below the mouth moulding on one side and a miscast pellet-in-circlet in the same spot on the other side. The pellet-in-circlet decoration does not appear on Late Bronze Age axes of the Ewart Park metalwork assemblage, but is a well-known design component on numerous Early Iron Age axes of Sompting type axes, especially those of Cardiff II and Kingston variants (for example no. 85: Lode, Cambridgeshire; no. 93: Horningsea, Cambridgeshire, Plates 8+10). However, it is not only the decoration on this axe (no. 77) that suggest an Early Iron Age date, but also the small size of the hoard which indicates a date of deposition during the Late Bronze Age-Early Iron Age

transitional period or very early in the Early Iron Age. The hoard from Bassingbourn contains only two socketed axes and except for the two hoards from East Rudham (42+ axes) and Watton (7 axes) (Norfolk, nos. 845-886 and nos. 889-895, Plates 42-44), all other hoards from East Anglia contain only two or three axes, regardless of their type. Their distribution pattern suggests that half of these small hoards (those that were not made up of East Rudham axes) had been deposited along the Fen edges, alongside the bulk of the unassociated socketed axes. This geographical overlap suggests that the motivation driving the deposition of small numbers of axes in Early Iron Age hoards from East Anglia may parallel the large number of single finds from the area. There are 60 single finds from East Anglia and almost all of them were found along the Fen edges and west Norfolk. This is exactly where the small hoards were found, including the hoard from Bassingbourn with its two transitional axes. The only exception is the Cringleford hoard (nos. 842-844, Plates 41+42) which consists of three rather than two East Rudham type axes, but depositions of East Rudham axes followed different rules and distribution patterns.

The hoard evidence suggests that two of the smaller hoards containing East Rudham axes may have originally been part of larger, now dispersed hoards (Watton, nos. 889-895 and Cringleford, nos. 842-844). The axes from both hoards were found dispersed in a field and in the case of the hoard from Watton an additional axe from the same field was discovered decades later (no. 895). The whereabouts of the third axe from Cringleford are currently unknown but the Sites and Monuments Record entry suggests that this, too, was found in the same field at a later date (SMR record No. 16229).

In East Anglia, East Rudham type axes are always found in pure axe hoards and they are never associated with axes of other types, casting residue or other items of metalwork. The hoard from East Rudham is the largest of the group (nos. 845-886); the three other hoards are considerably smaller (Watton: 7 axes; Syderstone: 2 axes; Cringleford: 3 axes). Unlike most of the other metalwork from East Anglia, East Rudham type axes were not deposited along the Fen edges. They are distributed in what almost looks like a wide semi-circle around the Foulsham area of northeast Norfolk.

Axes of East Rudham type can be indirectly linked with socketed axes of Portland, Blandford and Hindon type from the Southern region. In terms of size, weight and surface finish they are extremely similar, yet they were never found in association. All four axe types are characterised by their small size, thin and brittle casting, their silvery surface and the fact that they were deposited in as-cast condition. Socketed axes of East Rudham type are slightly longer in body shape than their cousins from the Southern region and their linear decoration clearly distinguishes them from the rib-and-pellet decoration of Portland type axes and the plainness of Hindon type axes. They look similar to Blandford type axes because they share the linear decoration, but not their size and shape.

East Rudham axes are directly related to another East Anglian axe type, linear-decorated axes, which display the same decoration and which are of approximately the same size. However, they do not share the same weight, metallurgy and surface finish. Also, linear-decorated axes very often show signs of wear and use which cannot generally be found on axes of East Rudham type. The only exception of an East Rudham axe showing distinct wear patterns is the axe from Little Massingham (no. 907, Plate 47).

7.7.2. East Anglia: Single Finds

East Anglia produced 60 unassociated finds of Early Iron Age socketed axes which is the largest number of unassociated finds from any British region (fig. 7.41). The region with the second largest number of unassociated finds is the neighbouring Thames Valley with 45 socketed axes. Except for the South East (4 axes), the other regions produced between 26 and 37 single finds which is just over half of East Anglia's number of unassociated Early Iron Age socketed axes. Half of East Anglia's corpus of Early Iron Age socketed axes are linear-decorated axes or axes of Sompting type, Cardiff II variant: this region contains the largest concentrations of these two axe types in Britain.

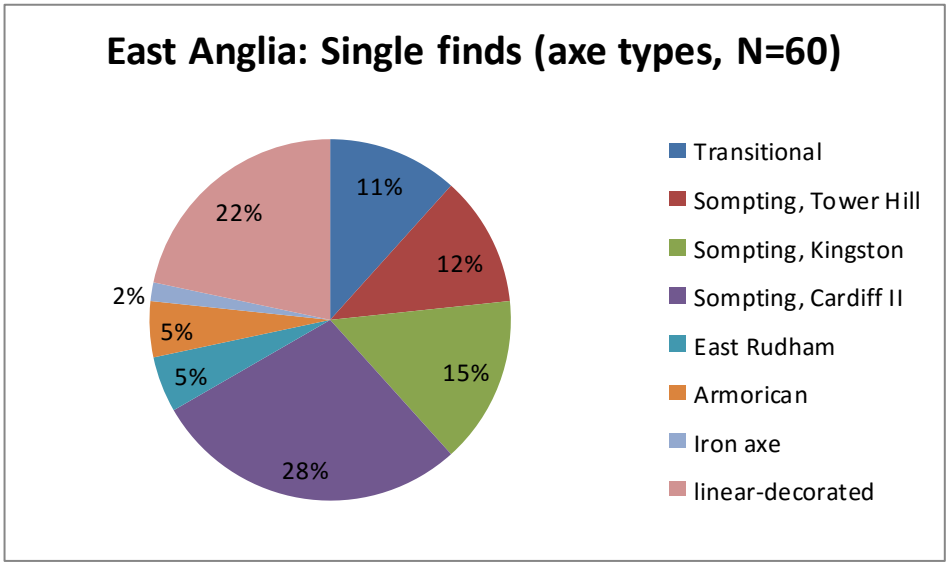


Figure 7.41: East Anglia: single finds (axe types), N=60

Other finds of linear-decorated axes are known from the Midlands (2), the North (1), the South (2) and the Thames Valley (2), but the relatively large number of 13 specimens from East Anglia is unusual. Their predominance may be explained with the resemblance to ribbed axes of South Eastern type and facetted axes, both Late Bronze Age types which are well-known from East Anglian Late Bronze Age hoards. Linear-decorated axes are decorated with slightly curved parallel ribs and grooves along the outer edges of the axes' faces, almost creating a separate facet between the face and side facets which may explain their resemblance to facetted axes and axes of South Eastern type. Although these similarities in style and shape suggest that linear-decorated axes may have evolved from Late Bronze Age facetted axes, they are more closely related to Early Iron Age East Rudham type axes which whom they share size, shape and decoration. However, they do not share weight, metallurgy, metal thickness and surface finish. Linear-decorated axes are heavier, with thicker walls and definite evidence for use, wear and re-sharpening. One of the examples from Norfolk was found with a fragment of the haft still inside the socket suggesting it was deposited after use (Hockwold, no. 903). Socketed axes of East Rudham type show, like the axes of related types from Southern England, no signs of wear at all.

The other difference between these two types is their individual distributions. Linear-decorated axes were mainly deposited along the Fen edges, like most of the other single finds while the few single finds of East Rudham axes come from Norfolk, where they were found in the same are as hoards with axes of the same type. The different places and modes of deposition could indicate different reasons for deposition. They certainly suggest that the axes were made for different purposes initially and that the axes had different *vitae* based on their appearance and metallurgy. While linear-decorated axes were in all likelihood initially produced as tools for woodwork, axes of East Rudham type were not. Linear-decorated axes show definite signs of their blades being worked post-casting (striations, shaping of blade) and they had their casting seams removed and blades sharpened and resharpened. East Rudham axes, on the other hand, were deposited in as-cast condition, but without their clay core. Their close typological relationship with the Southern English Portland, Blandford and Hindon types probably indicates a degree of contact between the two areas. Furthermore, it suggests an Early Iron Age date for East Rudham axes which, unlike the Southern English types, have not yet been found in association with any other metalwork that would narrow down their date of deposition. The only possible indication of a date of their manufacture, circulation and deposition comes from Sussex where they have been found as part of the Sompting hoard (nos. 1009+1010). Unfortunately, the hoard was not available for study so that it is unknown whether the two East Anglian axes in the hoard are linear-decorated axes or axes of East Rudham type. However, Worthing Museum provided images which suggest that the axes were of East Rudham type, but unless their weight and metal thickness can be determined, their identification must remain uncertain. However, the association of two linear-decorated or East Rudham axes with Sompting axes in this hoard that also included a cauldron of Class B2, Type Raffrey Bog, Variant Sompting and a Central European *Krempenphalere*, suggests a later date in the Early Iron Age, if it is assumed that all items in the hoard were contemporary (Gerloff 2010, 218-20; O'Connor 1980, 423, no. 223 and 585, List 227, no. 28). Axes of Portland type were only found in association with objects in multi-period hoards or pure axe hoards made up solely of Portland and Blandford axes which makes them equally

difficult to date. However, a fragment of a Blandford axe was found in association with Late Ewart Park and transitional metalwork in the hoard from Kings Weston Down (Bristol, no. 56). There were no Sompting axes in this hoard, but the broken-up metalwork was associated with a rim fragment of a B1 cauldron which suggests that it was contemporary with Llyn Fawr which included two complete cauldrons of Type B1, Variant Llyn Fawr (Gerloff 2010, 182-187). These two tenuous associations of East Rudham and Blandford axes with earlier (Llyn Fawr) and later Early Iron Age metalwork (Sompting) suggest that East Anglia's East Rudham and linear-decorated axes were a later development, possibly from linear-decorated axes, than the South's Blandford and Portland axes. This chronological relationship between the Llyn Fawr and Sompting hoards is also supported by O'Connor's and Gerloff's research (O'Connor 2003, Fig. 7; Gerloff 2010, 32-35; Tab.3).

7.7.3. East Anglia: Contexts

The distribution map of Early Iron Age socketed axes in East Anglia shows that the majority of socketed axes were discovered along the Fen edges which, in the Late Bronze and Early Iron Age would have separated dry land from the large wetland area of the Fens. The Fen edges included low-lying uplands which surrounded the Fenlands (figs. 7.42-7.45).

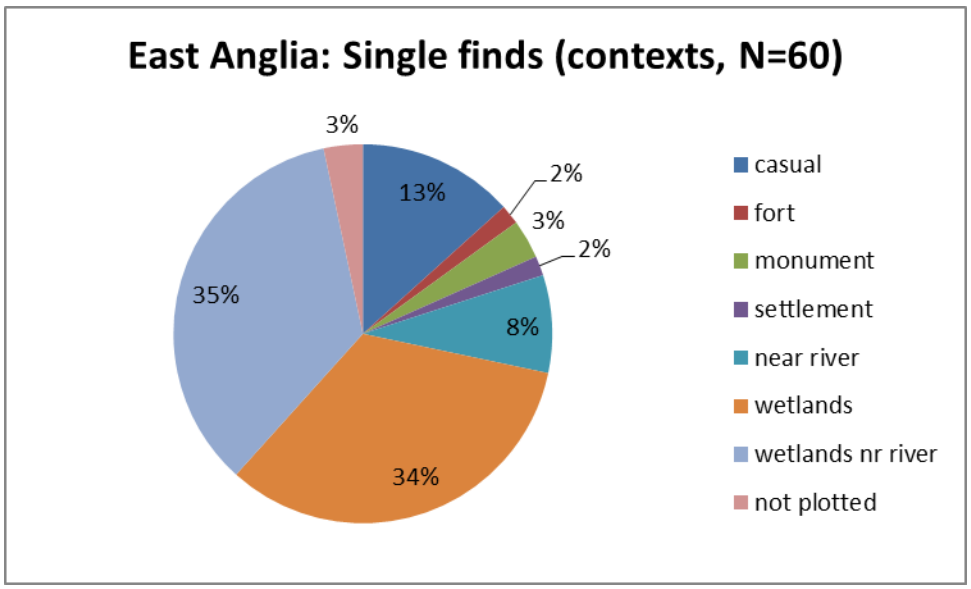


Figure 7.42: East Anglia: single finds (contexts), N=60

Today, the Fens are no longer wetlands and it is notable that dredging has found few Early Iron Age socketed axes in the Fenland area that is the area between the Rivers Nene, Welland, Great Ouse and Witham (fig. 7.43). Four socketed axes were found on one of the former Fen islands, an outcrop of higher land never covered by the fen peats (nr. Ely, nos. 87+88; Fordham, no. 92; Ely District, no. 94, all Cambridgeshire).

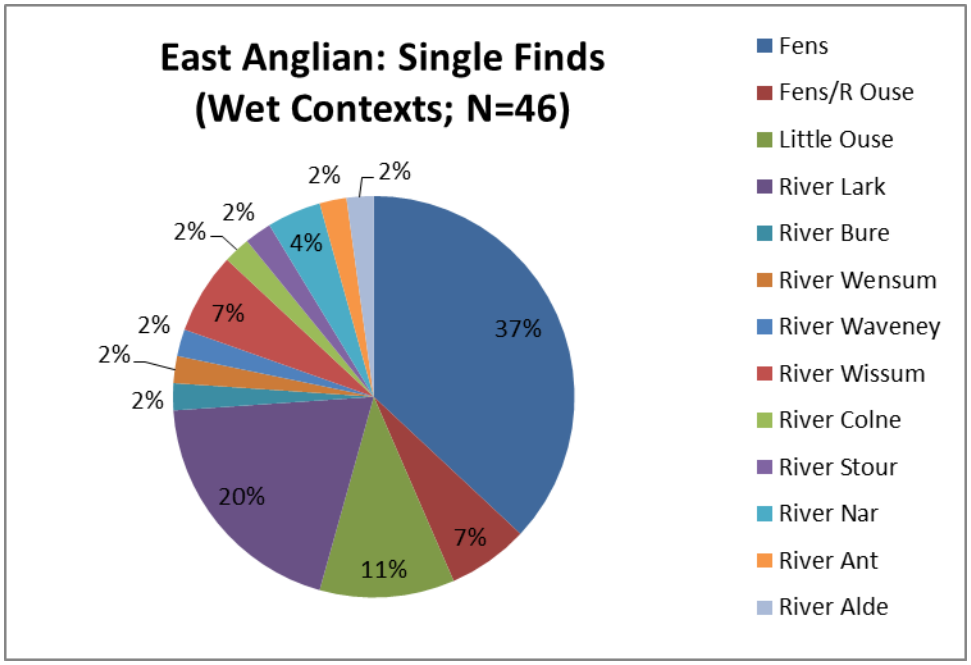


Figure 7.43: East Anglia: single finds (wet contexts), N=46

Unlike the Thames region where the majority of axes were found whilst dredging the river, in East Anglia Early Iron Age socketed axes were not discovered in or alongside the four big rivers that form the Fenlands, or the Fenlands themselves, but along their edges. This distribution suggests that in East Anglia the large rivers were not considered appropriate places for the deposition for Early Iron Age socketed axes. Areas further inland where wetlands and dry land met were the preferred place for metalwork deposition.

46 out of 60 East Anglian Early Iron Age socketed axes were discovered in wet contexts, but nearly half of them (44%) were discovered in the area of the Fen edges rather than in or near any of the rivers. The only exception is the river Lark where nine socketed axes were discovered. Seven of them came from the Mildenhall area (nos. 979-985) in Suffolk, which is an area that also produced a small hoard of two axes (nos. 971+972). However, the town of Mildenhall sits

on the Fen edge, between Cambridge and Thetford, and it is very likely this Fen edge location was the target for metalwork deposition and not the nearby river Lark.

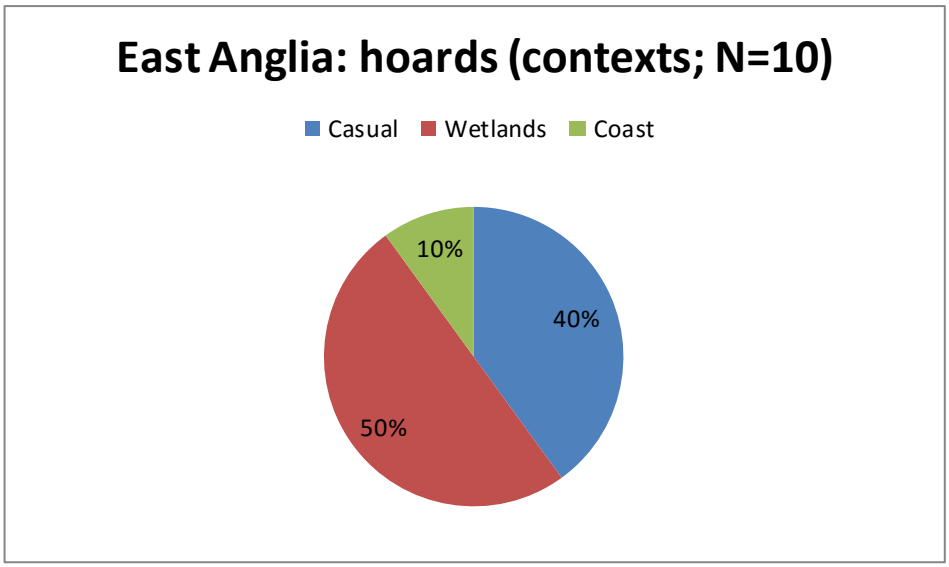


Figure 7.44: East Anglia: hoards (contexts), N=10

Five East Anglian hoards were found in or near wetlands, the exception being three of the East Rudham axe hoards (East Rudham, nos. 845-886; Syderstone, nos. 887-888 and Watton, nos. 889-895) and the Transitional hoards from Wymington (Bedfordshire, nos. 1-51) and Dovercourt (Essex, nos. 650-664). However, if we discount the two Transitional hoards from Wymington and Dovercourt, it becomes apparent that, while the smaller axe hoards of two or three axes were mainly found in the wetlands bordering the Fens, axe hoards containing East Rudham axes were found in predominantly dry locations in Norfolk (fig. 7.44).

7.7.4. East Anglia: Discussion

East Anglia is well known for its abundance of Late Bronze Age metalwork of the Ewart Park metalwork tradition. Even though metalwork deposition had decreased drastically in the Early Iron Age, East Anglia remained an important focus for the deposition of bronze socketed axes: excluding the two transitional hoards, 122 Early Iron Age socketed axes were found in this region, 62 of which came from hoards.

The three counties not bordering the Fen edges yielded significantly fewer socketed axes of Early Iron Age date: Bedfordshire produced only one linear-decorated axe (no. 52), Hertfordshire one axe of Sompting type, Tower Hill variant (no. 774b.) and Essex one axe of Sompting type, Tower Hill variant (no. 666) and two iron socketed axes (nos. 665+667). The largest number of socketed axes comes from the three counties directly bordering the Fens: Cambridgeshire (six axes from three hoards and 17 single finds), Norfolk (54 axes from four hoards and 24 single finds) and Suffolk (two axes from one hoard and 14 single finds) showing that in Early Iron Age East Anglia deposition in wet contexts along the Fen edges was prevalent. Pryor and Bamforth (2010, 66) argue that the very edge of the dry land in the Late Bronze Age could be interpreted as a midden which slowly acquired debris such as bone, pottery, flint and metalwork. The corpus of finds from the Fen edges is similar to those from other midden sides in Southern England and the Thames Valley such as Wallingford, Runnymede Bridge and Potterne (Thomas et al 1986; Needham 1991; Lawson 2000).

Unlike Early Iron Age hoards from the Thames Valley, the South East and South Wales, East Anglian hoards contained only socketed axes. Furthermore, except for hoards made of up East Rudham axes, no more than two axes were deposited together. These small East Anglian hoards share more similarities with the depositions of single axes than larger hoards. However, the exception to this are a group of four very distinct Norfolk hoards that contained only axes of East Rudham type, three of which contain more than just two axes: the hoards from Cringleford (two or three axes, nos. 842.-844.), East Rudham (42 axes plus 35 fragments, nos. 845.-886.), Syderstone (two axes, nos. 887.-888.) and Watton (seven axes, nos. 889.-895.). Furthermore, axes of East Rudham type stand out from the other East Anglian axes because all 53 East Rudham axes were found in a small area of northeast Norfolk. In this respect, East Rudham axes are similar to Dorset's Portland type axes which share an equally limited regional distribution in south Dorset. A limited distribution is also attested for axes of Hindon type: they have so far only been found in the eponymous hoard from Wiltshire (nos. 1354-1387). Dorset's Hindon, Portland and Blandford type axes are metallurgically the closest relatives of East Rudham axes and

they are clearly related in other respects, too: axes of all four types are comparatively small, light, thinly cast and enough tin was added to the alloy to make the axes brittle and render them useless as tools. They were deposited in as-cast condition, some with their casting seams still intact and their ceramic cores still inside.

However, even though they are related types, East Rudham axes were never found in association with Portland or Blandford axes and their connection is based entirely on their similar high-tin bronze metal composition and their deposition in axe hoards. Both groups of axes represent a similar phenomenon in two different areas of Britain. It is most certainly no coincidence that the two areas, Norfolk and Dorset, are situated in the two regions with the greatest and most diverse corpus of British Early Iron Age metalwork on the one hand and peripheral to the South-East and the Thames Valley with their connections to the Continent and stronger evidence for early iron working on the other.

In 1968, Cunliffe discussed the Early Iron Age pottery of several East Anglian sites in great detail since, as he pointed out, although many individual excavation reports had been published, few attempts had been made to study the region as a whole (Cunliffe 1968, 175). For his discussion Cunliffe chose three key sites, West Harling, Fengate and Darmsden, that provided him with a sufficiently large sample of material. He used these to establish a relative Iron Age chronology of pottery styles for East Anglia. Cunliffe's 'West Harling group' represents the Earliest Iron Age and thus the ceramic material contemporary to Llyn Fawr metalwork. Even though the corpus of material evidence from the Early Iron Age site at Micklemoor Hill, West Harling (Norfolk) did not yield any metalwork, the core distribution of Cunliffe's 'West Harling' style wares is similar to the distribution of East Rudham axes. This may suggest that the Early Iron Age people who used West Harling style pottery may have also deposited the hoards and single finds of East Rudham axes in the same area (Cunliffe 2005, 95, Figure 5.3).

7.8. The Midlands and North Wales

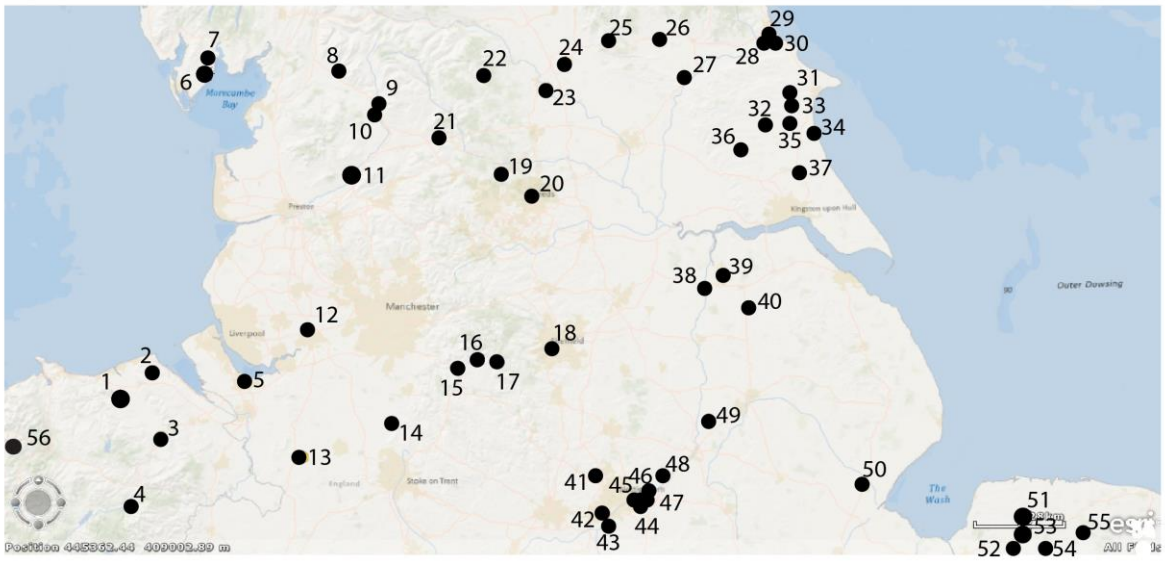
The region of the Midlands and North Wales includes the counties of Cheshire, Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire,

Shropshire, Staffordshire, Warwickshire and Worcestershire on the English side and Flintshire, Denbighshire, Merionethshire and Caernarvonshire on the Welsh side (fig. 7.45).

	Number of axes in hoards	**Number of single finds**
Cheshire	-	3
Derbyshire	-	3
Leicestershire	15	1
Lincolnshire	10	4
Northamptonshire	-	2
Nottinghamshire	-	10
Shropshire	-	1
Staffordshire	-	2
Worcestershire	-	1
Flintshire	-	1
Denbighshire	2	1
Merionethshire	-	1
Caernarvonshire	-	1

Figure 7.45: Numbers of socketed axes from the Midlands and North Wales (hoards and single finds)

Although the geographical area of this region is extensive (including 13 counties), there are only 31 single finds and 3 hoards from this region (fig. 7.45). The three hoards are transitional in nature, but two can probably be dated to the very late Bronze Age (Ketton, Rutland, Leicestershire: nos. 811-826; Branston, Lincolnshire: nos. 828-837) and the third one very early in the Iron Age (Plas-yn-cefn, Denbighshire, nos. 1288-1289). The hoards from Ketton and Branston (not mapped) are very similar to the hoards from Dovercourt (Essex; nos.650-664) and Wymington (Bedfordshire; nos. 1-54). In character they are axe hoards, but are entirely made up of Late Bronze Age and transitional types rather than Early Iron Age axes.



1 Plas-yn-Cefn, Denbighshire (nos. 1288+1299)
2 Y Glol, Flintshire (no. 1291)
3 Llanbedr Dyffryn Clwyd, Denbighshire (no. 1290)
4 Berwyn Mountains (no. 1332)
5 Ellesmere Port, Cheshire (no. 101)
6 Skelmore Heads, Cumbria (nos. 193-198)
7 Ulverston, Cumbria (nos. 1395-1397)
8 Ingleton Area, North Yorkshire (no. 1229)
9 Settle Area, North Yorkshire (no. 1238)
10 Rathmell, North Yorkshire (no. 1232)
11 River Ribble at Clitheroe, Lancashire (nos. 808+809)
12 Winwick, Lancashire (no. 810)
13 Faddiley, Cheshire (no. 102)
14 Congleton, Cheshire (no. 100)
15 Peak Forest, Derbyshire (no. 202)
16 Mam Tor, Derbyshire (no. 1398)
17 Brough, Derbyshire (no. 201)
18 Wybourn Estate, Sheffield, West Yorkshire (no. 1240)
19 Yeadon, North Yorkshire (no. 1243)
20 near Leeds, West Yorkshire (no. 1230)
21 Embsay Station, West Yorkshire (no. 1225)
22 Hambledon Hill, North Yorkshire (no. 1228)
23 Givendale, North Yorkshire (no. 1232)
24 Topcliffe, North Yorkshire (no. 1241)
25 Cold Kirby, North Yorkshire (no. 1224)
26 Welburn, North Yorkshire (no. 1242)
27 Broughton, North Yorkshire (n. 1221)
28 Seamer Carr, East Yorkshire (no. 1236)
29 Seamer Carr, East Yorkshire (no. 1237)
30 Cayton Carr, East Yorkshire (no. 1223)
31 Rudston, East Yorkshire (no. 1235)
32 Driffield, East Torkshire (no. 1227)
33 Burton Agnes, East Yorkshire (no. 1222)
34 Skipsea, East Yorkshire (no. 1239)
35 Gembling, East Yorkshire (no. 1226)
36 Middleton, East Yorkshire (no. 1231)
37 Long Riston, East Yorkshire (no. 1234)
38 River Trent, Lincolnshire (no. 841)
39 Scunthorpe, Lincolnshire (no. 840)
40 Redbourne, Lincolnshire (no. 839)
41 Greasley, Nottinghamshire (no. 924)
42 Attenborough, Nottinghamshire (no. 922)
43 Gotham, Nottinghamshire (no. 923)
44 Holme Pierrepont, Nottinghamshire (no. 926)
45 Holme Pierrepont, Nottinghamshire (no. 927)
46 Holme Pierrepont, Nottinghamshire (no. 928)
47 Holme Pierrepont, Nottinghamshire (no. 925)
48 Shelford, Nottinghamshire (no. 930)
49 South Scarle, Nottinghamshire (no. 931)
50 Boston, Lincolnshire (no. 838)
51 Syderstone, Norfolk (no. 887-888)
52 Little Massingham, Norfolk (no. 907)
53 East Rudham, Norfolk (nos. 845-886)
54 Tittleshall, Norfolk (no. 916)
55 Wood Norton, Norfolk (no. 918)
56 Llanberis, Falls of Snowdon (no.1287)

Figure 7.46: Locations of Early Iron Age socketed axes (hoards and single finds) in the Midlands and North Wales

There are 31 unassociated Early Iron Age socketed axes from the Midlands and North Wales but except for Nottinghamshire, most counties produced no more than one or two specimens (fig. 7.47). Most of the axes from Nottinghamshire were discovered at Holme Pierrepont during dredging works of the Trent (nos. 925-928), but there were also discoveries from further downstream (no. 931: South Scarle, Nottinghamshire; nos. 840-841: Scunthorpe and River Trent, Lincolnshire).

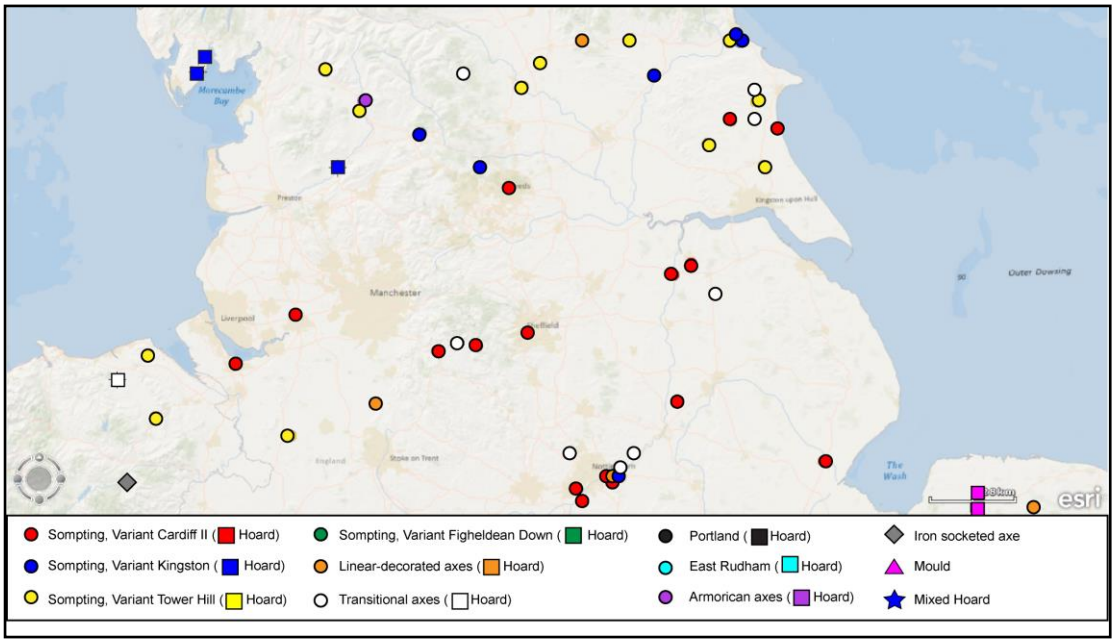


Figure 7.47: Distribution of Early Iron Age socketed axes in the North, Midlands and North Wales

Several Early Iron Age socketed axe types are present in the Midlands and North Wales, but transitional axes and axes of Sompting type, Cardiff II variant are predominant, especially in Nottinghamshire and Derbyshire.

7.8.1. The Midlands and North Wales: Hoards

There are only three hoards from this area and they are all of transitional rather than Early Iron Age date. Two of them probably date to the very late Bronze Age (Ketton, Rutland, Leicestershire: nos. 811-826; Branston, Lincolnshire: nos. 828-837) but were included in this research due to their contexts and association rather than the axe types they contain. However, a small number of the socketed axes which were discovered at Ketton (Leicestershire, nos. 811-

826) display Early Iron Age features: most of the axes display a double back-to-front mouth moulding and the upper mouth moulding is usually more pronounced than the lower mouth moulding. Their faces' decoration consists of different arrangements of ribs (Vine 1982, 192-3). The hoard from Branston, on the other hand, contains axes of Late Bronze Age date, such as Yorkshire and Everthorpe type axes (Lincolnshire, nos. 828-837). However, two axes – one ribbed and one plain – have a very distinct sub-rectangular mouth moulding which is more typical of Early Iron Age than Late Bronze Age socketed axes. Moreover, all ten axes from this hoard were deposited in an untrimmed state with their casting seams still intact and Davey also argues that several of them were cast in the same mould (Davey 1973, 93, fig. 32). Pure axe hoards such as this are a rare occurrence in the Late Bronze Age, where mixed and scrap hoards predominate, but they are a characteristic feature of the Early Iron Age. Furthermore Early Iron Age hoards often contain socketed axes in untrimmed or unfinished state as well as several axes which were made in the same mould. The third hoard from this region is also a transitional hoard but it contains only two socketed axes and only one of them exhibits Early Iron Age characteristics (Plas-yn-cefn, Denbighshire, nos. 1288-1289, Plates 117-118). The axe is slightly more wedge-shaped and it is decorated with three long uneven ribs terminating in a small flat pellet (no. 1289), while the other one is a typical Late Bronze Age axe with a curved blade and ribbed decoration (no. 1288).

7.8.2. The Midlands and North Wales: Single Finds

The Midlands and North Wales provided 31 single finds of Early Iron Age socketed axes. This number of axes is spread over a comparatively large area with some counties only producing one specimen, such as Leicestershire (no. 827, Jericho Lodge) and Shropshire (no. 936, Wolverley).

The greatest concentration of socketed axes is in the Holme Pierrepont area of Nottingham, where at least four axes were discovered during dredging works of the Trent (nos. 925-928). A further four axes were discovered not far from Holme Pierrepont (nos. 922: Attenborough, no. 923: Gotham, no. 930: Shelford and no. 929: Hoveringham, all Nottinghamshire); The distribution of Early Iron Age socketed axes in Lincolnshire and Nottinghamshire close to or in the Trent

suggests that this river played a major role in Early Iron Age axe deposition: except for two transitional axes (nos. 839: Redbourne, Lincolnshire, and 924: Greasley, Nottinghamshire) and one axe of Sompting type, Cardiff II variant (no. 838: Boston, Lincolnshire), all other socketed axes from Lincolnshire and Nottinghamshire were discovered in or very close to the Trent. Another less obvious cluster of three finds is in the Peak District in Derbyshire (nos. 201-203).

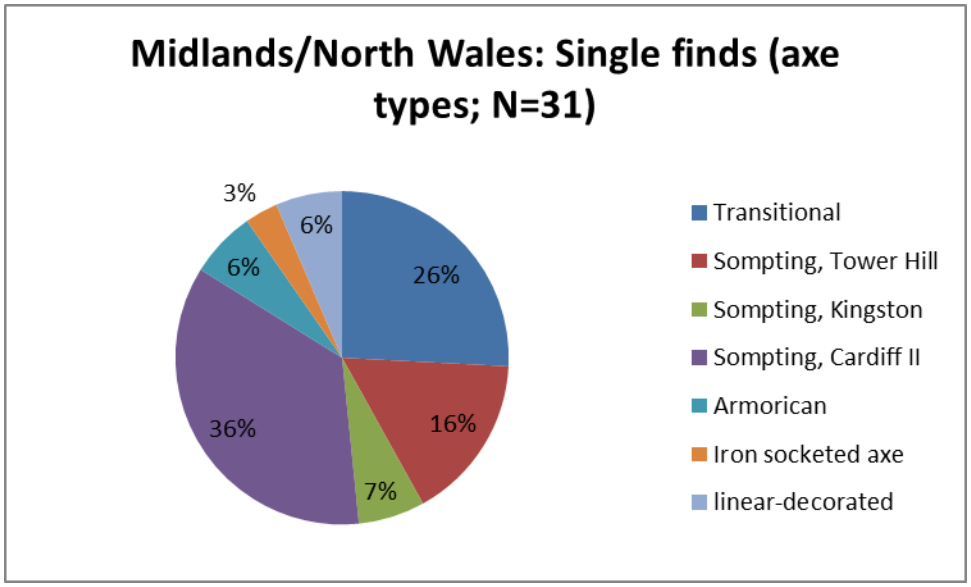


Figure 7.48: Midlands/North Wales: single finds (types), N=31

The Midlands and North Wales provided specimens of nearly all axe types (except the region-specific axe types Portland, Blandford, Hindon and East Rudham as well as Sompting type, Figheldean Down variant). However, transitional axes and axes of Sompting type, Cardiff II variant outnumber all other types by approximately 3:1 (fig. 7.48). Even though there is a small cluster of Cardiff II axes around Holme Pierrepont, they are distributed over wide areas of Cheshire, Derbyshire and Nottinghamshire. There are five transitional axes which complement the distribution of Sompting type, Cardiff II variant axes, and four axes of Sompting type, Tower Hill variant which were all found in the western part of this region, that is in North Wales, Shropshire and Cheshire while Variant Cardiff II axes are evenly spread over the English Midlands and Lincolnshire.

7.8.3. The Midlands and North Wales: Contexts

The three hoards were discovered in different parts of this region which makes it difficult to generalise any information and interpretation about their contexts. The hoards from Plas-yn-Cefn (Denbighshire, nos. 1288+1289) and Ketton (Leicestershire, nos.811-826) were found near the rivers Elwy and Welland respectively, but the hoard from Branston (Lincolnshire, nos. 828-837) seems to have been a casual deposition, apparently unrelated to any existing modern feature.

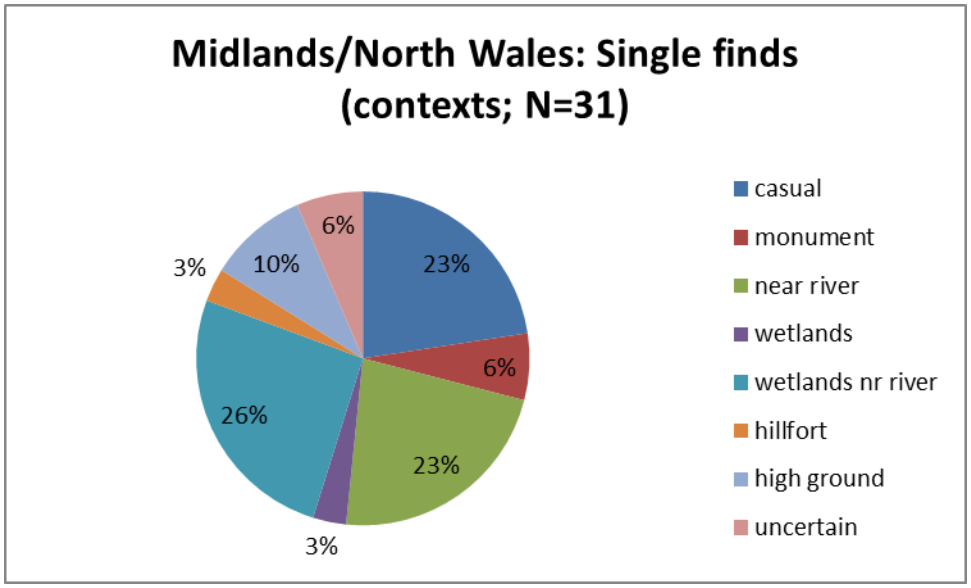


Figure 7.49: Midlands/North Wales: single finds (contexts), N=31

The unassociated socketed axes from the Midlands and North Wales, however, provide us with a little more contextual information: just over half of them were discovered in wetlands or wet contexts near a river while a quarter of them were found in a 'casual' findspot, that is a place that does not appear to relate to a water feature, a monument or a settlement (fig. 7.49).

Sixteen socketed axes from this area were discovered in wet contexts near a river, but the majority (nine axes) came from the largest river of the area, the Trent (nos. 841, 922, 925-931; fig. 7.50). Most of the socketed axes found in the Trent were discovered in the gravel pit at Holme Pierrepont (nos.925-928), which is a location well-known for its metalwork deposition (Burgess and Colquhoun 1988, 113, no. 696).

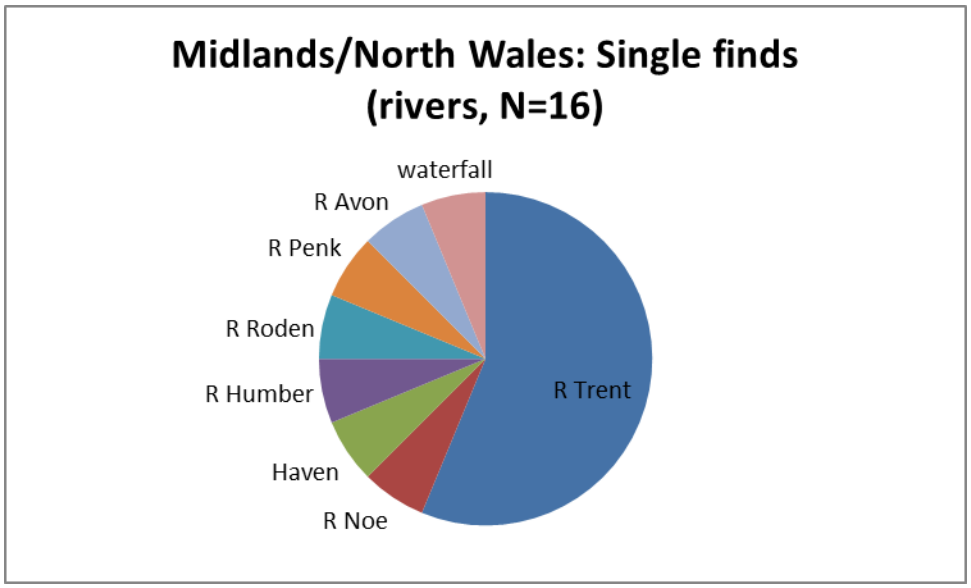


Figure 7.50: Midlands/North Wales: single finds (rivers), N=16

Even though the items of metalwork have not been found in close association, Colquhoun and Burgess (1988, 113) suggest that the site at Holme Pierrepont could have been a settlement site which has eroded into the river, similar to Wallingford (Oxfordshire) and Brentford (Central London).

7.8.4. The Midlands and North Wales: Discussion

The Midlands and North Wales region is extensive, yet only 31 axes and three hoards were discovered here. The single finds are widely spread with only few obvious clusters such as in the Trent near Holme Pierrepont and in the Peak District.

North Wales produced only four single finds and one small hoard. Compared with the Early Iron Age assemblages from the Vale of Glamorgan in South Wales, the amount of Llyn Fawr metalwork from North Wales is marginal. This contrast is mirrored in the Midlands when compared to the numbers of axes from East Anglia, the Thames Valley and the South. However, the Midlands produced more Early Iron Age socketed axes than the North and Scotland.

The unequal distribution of Early Iron Age socketed axes in Wales is not surprising, however. Looking at the preceding Late Bronze Age evidence, Burgess (1968, 14) argues that within Wales and the Marches, the distribution of 'South Welsh' socketed axes shows a Llantwit industry confined strictly to the

south-eastern counties of Glamorgan and Monmouthshire which remains completely unparalleled in North Wales. While North Wales had previously been a dynamic centre of metalwork production, from the Late Bronze Age onwards its industries seem to have gone into decline (Burgess 1968, 14). This pattern is still evident in the distribution of Early Iron Age metalwork: while South Wales (and especially the Vale of Glamorgan) produced two large mixed hoards and several early iron socketed axes and Armorican axes and a midden or feasting site (Llanmaes), Central and North Wales have nothing comparable to offer in terms of evidence.

Cunliffe (1991, 96-7) was in agreement, suggesting that North Wales seems to have been a technological backwater in the Early Iron Age, receiving exotic artefacts from Ireland, England and South Wales rather than developing its own. Apart from the small hoard from Plas-yn-cefn, Denbighshire (nos. 1288+1289), there are no transitional or Early Iron Age hoards to speak of and only very few single finds from this area are directly related to the Llyn Fawr material found elsewhere in Britain. The only metalwork assemblages or C14 dates which are directly related to the British Llyn Fawr metalwork tradition come from some of the hillforts in the central and northern Welsh Marches. While the metalwork from the Breiddin does not include many distinctive Ewart Park or Llyn Fawr types, organic material from the palisades, ramparts and a furnace provided C14 dates for the settlement in the 9th-6th centuries. The haft of a rather indistinct Late Bronze Age socketed axe yielded the date of 754+/50bc (BM-798) (Musson *et al.* 1991, 13). Certainly more important for the late bronze and early iron metalworking traditions of Northern Wales is the assemblage from the hillfort at Dinorben, Denbighshire (Savory 1980, 58). Some of the earliest iron metalwork from the hilltop site is most probably amongst the earliest ironwork in the country, i.e. the three iron ring-headed pins and a small iron razor – the only one of its kind found in Britain (O'Connor 1980, 609, List 269, no. 1; Savory 1958a, 286-8).

The situation in the Midlands is, though slightly more promising than in North Wales, still not comparable with the large amounts of Late Bronze Age and Early Iron Age metalwork that come from contexts in Southern and Eastern areas of England and the Thames Valley. Hillforts did not seem to play a major

role in the Late Bronze and Early Iron Ages of Central England and not very many other settlement sites have been found and excavated in this area so far. The exception is the hillfort of Mam Tor, Derbyshire, which was excavated in the 70s and subsequently published by Coombs and Thompson (1979). Although the C14 dates for the site would date the palisades to the beginning of the Late Bronze Age, Coombs and Thompson suggest that wood from aged trees was used (Coombs and Thompson 1979, 48-52). The site also produced a very weathered fragment of a Sompting type, Cardiff II variant axe (no. 1398).

Cremated bones from another possible midden or funeral site (Broom, Warwickshire) yielded C14 dates which date it to the Early Iron Age. The cremated bones yielded dates of 2570+/-55BP (OxA-6282), cal.840-520BC (95.4% confidence/2σ) and 2475+/-55BP (OxA-6283), cal.790-410BC (95.4% confidence/2σ) and since they were found in the vicinity of fragments of B2 cauldrons, we are probably dealing with a site used in the later part of the Early Iron Age. The site at Broom has been compared to the feasting and pyre site of Llanmaes, Glamorgan, where cauldron fragments and socketed axes of Early Iron Age date were discovered. However, so far, no radio-carbon date could be obtained. The purpose of these sites is still under investigation but possible interpretations include midden, pyre and feasting or metalworking sites (Lodwick and Gwilt 2004; Lodwick and Gwilt 2005; Lodwick and Gwilt 2007; Lodwick and Gwilt 2009; Lodwick, Gwilt and Deacon 2006).

The rest of the Midlands provide only scarce evidence for Early Iron Age metalwork, mostly single finds of brooches and pins in addition to the socketed axes mentioned above. An explanation for this scarcity of finds might be the lack of general publications of sites and single finds. The richest assemblage from the Midlands comes from the River Trent and was published by Scurfield in 1997. Although we know of no Llyn Fawr hoards from the Midlands, there are a number of single finds (mainly swords and socketed axes), most of which come from the River Trent or the wetlands in the vicinity of the river (Scurfield 1997, 17-29). Most of the transitional and Early Iron Age socketed axes from this area are either transitional rib-and-pellet decorated axes or Sompting type, Cardiff II variant axes, which are closely related to transitional axes with rib-and-

pellet decoration and most probably derive from them. Sompting type axes of Kingston and Tower Hill variants are scarce in the Midlands.

Ostentatious metalwork deposition was not a characteristic feature of this area in general: There are not many Late Bronze Age Ewart Park hoards from the area, and the few that we know of were discovered in southern and eastern parts of the Midlands, e.g. Leicestershire and Lincolnshire. Late Bronze Age metalwork production in the Midlands and North Wales declined in importance even before the beginning of the Early Iron Age and only a few sites like Old Oswestry (Shropshire), Broom (Warwickshire), Mam Tor (Derbyshire), Fengate and North Lodge (Northamptonshire.) show occupation into the Early Iron Age.

7.9. Northern England

The area of Northern England includes the counties of Lancashire, Cumbria and Yorkshire (that is North Yorkshire, South and West Yorkshire and the East Riding of Yorkshire). There are no Early Iron Age socketed axes from County Durham or Northumberland (figs. 7.46; 7.51+7.55).

There are 26 single finds of socketed axes and 11 axes from three hoards. The 26 single finds were all found north of the Humber and they are someone unevenly spread across the east and west side of the South Pennines. The most northerly find is one single axe of Sompting, Kingston variant from Ainstable, Cumbria (no. 199, Plate 124).

	Number of axes in hoards	**Number of single finds**
Cumbria	9	2
Co. Durham	-	-
Lancashire	2	1
Northumberland	-	-
Yorkshire	-	23

Figure 7.51: North England: Numbers of socketed axes (hoards and single finds)

There are only three small hoards from the North and all three come from the west side of the Pennines: one was found in Lancashire (Clitheroe, nos.

808+809) and two in South West Cumbria (Skelmore Heads, nos. 193-198 and Ulverston, nos. 1395-1397, Plates 23, 24, 146, 147+154). While there are only three hoards, there are even fewer single finds of socketed axes from the North West; most of the single finds of socketed axes were discovered to the east of the Pennines in Yorkshire. However, the area to the east of the Pennines lacks Early Iron Age hoards.

The majority of Early Iron Age socketed axes found in the North were Sompting types, Tower Hill, Kingston and Cardiff II variants and the three hoards from the North West contained axes of Sompting type, Kingston variant.

7.9.1. Northern England: Hoards

There are three hoards from the North: a small hoard of two axes from Lancashire (River Ribble at Clitheroe, nos. 808+809) and two closely related hoards with three and six axes respectively from the Furness area of Cumbria (Skelmore Heads, nos. 193-198 and Ulverston, nos. 1395-1397). We have not much information about the small hoard from Clitheroe except that it was found on the banks of the River Ribble. Foster and Davey (1975, no. 120) only publish a drawing of one of the axes, and it seems to be the reproduction of an engraving from a mid-19th-century publication. The drawing suggests that this is an axe of Sompting type, either of Kingston or Tower Hill variant.

The other two hoards are from South West Cumbria: While the original hoard from Skelmore Heads was found over a century ago at the foot of Skelmore Heads hillfort in a limestone fissure, the more recent hoard find from Ulverston was found a little further away to the west of the hillfort site, on ploughed land (Harper-Gaythorpe 1903, 310). While the older hoard contained only socketed axes, the new hoard also included a small fragment of metalworking debris.

The two hoards from the Furness were not only found in the same geographical area, three of their axes are also closely related through mould sharing: The axes that shared a mould or mould template were the two decorated axes from Ulverston (nos. 1395+1396; Plates 146-147) and one of the decorated axes from the original hoard from Skelmore Heads (no. 193; Plate 146). Fortunately, axe no. 193 from Skelmore Heads is now in the Dock Museum (Barrow-in-Furness) so that all three axes could be compared in detail. This instance of

mould sharing, the fact some of the axes' as-cast condition and the addition of a small piece of casting to one of the hoards indicate that Early Iron Age metalworking took place on site. The mould that these three axes had been cast in produced at least one more axe: the single find from Dunnichen, Tayside (no. 1245, Plate 106). Even though the axes from Skelmore Heads and Ulverston could not be directly compared with the axe from Tayside (which is in the British Museum), the similarity of the decorative pattern which is unique to this small group of four axes leaves no doubt that they were made from the same mould template or possibly even cast in the same mould.

When comparing the surface finish and details of decoration of the three related axes from Ulverston and Skelmore Heads, one of them stands out (no. 1396): it has a rougher surface than the others and exhibits a very shiny silvery surface finish. It is also slightly heavier and chunkier than the other two and it shows no sign of finish or use while the other two show definite signs of wear, use and re-sharpening.

Its surface finish and deposition in its as-cast state suggest that this axe from Ulverston could be the first Early Iron Age socketed axe with unusually high tin content (that is a copper-alloy with a tin content of more than c. 20%) from an area outside East Anglia and Southern England. Similar (albeit much smaller and lighter) socketed axes with a silvery surface finish and a high tin-content are known from Dorset (Langton Matravers, nos. 226-598), Wiltshire (Hindon, nos. 1354-1387) and Norfolk (East Rudham, nos. 845-886). These axes are of Portland, Blandford, Hindon and East Rudham types. Axes of these four types were deposited in as-cast condition, but unlike the axe from Ulverston, they are small, brittle and very thinly cast. They were, in all likelihood, made for display and deposition rather than for use in woodwork. Given their shared characteristics (all except the size and weight) this could indicate that the silvery axe from Ulverston was equally made for display rather than actual impact work.

7.9.2. Northern England: Single Finds

There are 26 unassociated finds of Early Iron Age socketed axes from the North (fig. 7.52). Over three quarters of them are Sompting type axes of Kingston,

Tower Hill and Cardiff II variants, with Tower Hill variant being the most common. The small corpus of Early Iron Age socketed axes also includes three transitional axes (Gembling, no. 1226; Hambledon Hill, no. 1228 and Rudston, no. 1235), one Armorican axe (Settle Area, Yorkshire, no. 1238) and one linear-decorated axe (Cold Kirby, Yorkshire, no. 1224).

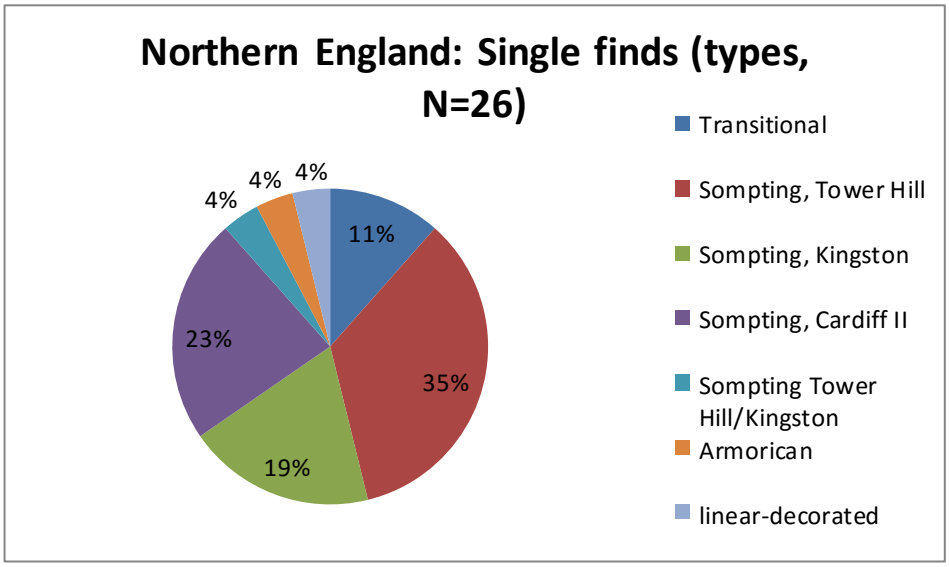


Figure 7.52: Northern England: single finds (types), N=26

The four Sompting type axes from South and West Yorkshire (Skipsea, no. 1239; Driffield, no. 1227; near Leeds, no. 1230 and Sheffield, no. 1240) and Lancashire (Winwick, no. 810) belong to the large group of Cardiff II variant axes which are scattered across the Midlands, especially in the Derbyshire and Nottinghamshire areas. A little bit further to the north west of this group, axes of Sompting type, Tower Hill variant seem to form their own small group north of the Humber, following the coastline and also reaching further inland. Sompting type axes of Kingston variant are dotted between these two larger groups and seem to make up the southern periphery of a wide-spread scatter of Kingston variant axes in Northern England and Southern Scotland.

7.9.3. Northern England: Contexts

This research shows that none of the single finds of Early Iron Age socketed axes appear to have been deposited in or close to any of the big Northern rivers (the Humber, the Lune, the Eden or the Ribble). Mullin argued that the west

side of the country is not renowned for bronze metalwork deposition in rivers (Mullin 2012, 47). Only few items of bronze metalwork have been recorded from the major rivers in the west (e.g. the Mersey, Lune or Ribble) while there is large-scale bronze metalwork deposition in the rivers that discharge into the North Sea, i.e. the Trent and the Thames (Scurfield 1997; Davis 1999; York 2002, Mullin 2012).

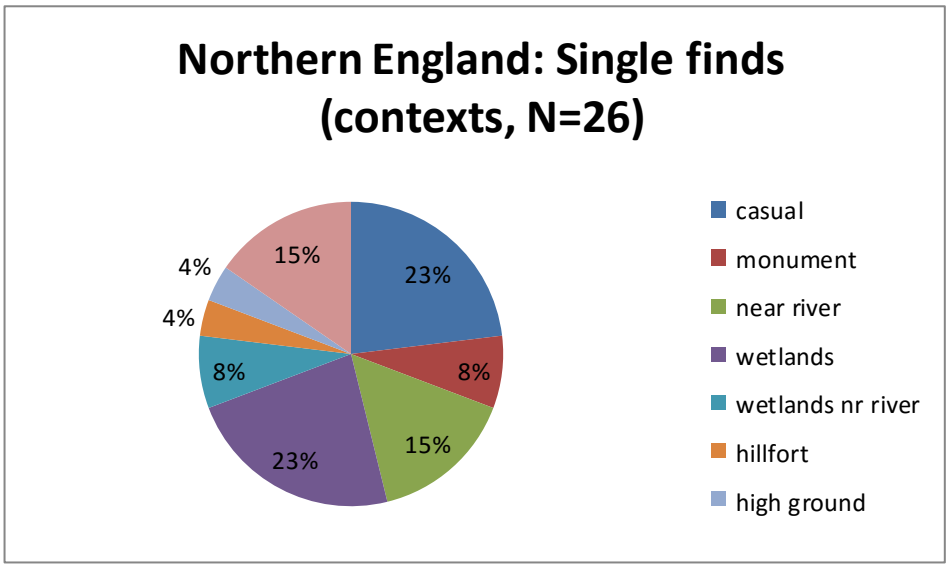


Figure 7.53: Northern England: single finds (contexts), N=26

Only 15% of the Early Iron Age axes from the North were discovered near a river, and almost all of them were found near a smaller river rather than one of the main ones (fig. 7.53). The two exceptions are nos. 1233 and 1238 (Rathmell and Settle Area, North Yorkshire) which were discovered near the Ribble which also happens to be the findspot of one of the hoards from the region (Clitheroe, nos. 808+809). The majority of Early Iron Age socketed axes from the North, however, were not discovered in wetlands or near a river (64%), but were casual finds or finds made near ancient monuments, hillforts or on higher ground.

7.9.4. Northern England: Discussion

There are only very few unassociated finds of Early Iron Age socketed axes from the North West and most of them are scattered across Yorkshire with a

small group close to the coastal area. Most of the axes from north of the Humber are of Sompting type, Tower Hill variant, but they also include a small number of Kingston and Cardiff II variants. These two variants of Sompting type have their main distributions in the Midlands (Cardiff II) and South Scotland (Kingston) and the axes from Yorkshire can be regarded as peripheral finds of these groups.

There are no Early Iron Age hoards from Yorkshire. This is curious because Yorkshire produced a lot of Late Bronze Age metalwork including many hoards containing three-ribbed axes of Yorkshire type (e.g. Schmidt and Burgess 1981, no. 1444, pl. 149C; *ibid*,. no. 1427, pl. 150A). The lack of equally large numbers of Early Iron Age socketed axes suggest that Yorkshire's significance in metalwork production and deposition had sharply declined by the Early Iron Age: Yorkshire no longer produced its own characteristic type of socketed axe and the number of axe depositions had vastly decreased. There is a decrease in the deposition of bronze metalwork in the North West, too, but it is not as drastic as in the North East. This is mainly because the North West never yielded much Late Bronze Age metalwork to start with; there has always been a North Eastern bias in Late Bronze Age metalwork manufacture and deposition as well as prehistoric occupation (Annable 1987, 251f.).

The most important Early Iron Age site in the North is the settlement of Staple Howe (Yorkshire), which produced not only Late Bronze Age and Early Iron Age pottery but also a small corpus of significant Late Bronze and Early Iron Age metalwork, that is two razors, fragments of harness mounts and a fragment of a socketed axe as well as two small iron objects. The site produced a C14 date of 450+/-150BC (Brewster 1963, 111-113; Manby 1986, 65, Table 1). There are no Early Iron Age socketed axes from Staple Howe, but the site is located in the centre of the small coastal cluster of Sompting, Tower Hill axes and may have played a role in manufacture and distribution of Early Iron Age metalwork. Schmidt and Burgess argued that the other types of metalwork from Staple Howe were clearly native Late Bronze Age types, i.e. the tanged chisels and tweezers, and Cunliffe, who looked at the pottery evidence suggested that Yorkshire formed part of the 'West Harling-Staple Howe' pottery style zone

which had developed from Late Bronze Age ceramic styles (Schmidt and Burgess 1981, 16; Cunliffe 1991, 100).

Cunliffe (1991, 101) argues that when excluding the area of eastern Yorkshire, the general impression given by the small corpus of material evidence and the apparent paucity of settlements in the north is that, compared with the south, the population of northern England appeared relatively small. Cunliffe (1991, 101) suggest further that since there is evidence from the Later Iron Age for animal husbandry involving a degree of movement of animals and people between summer and winter pastures, a similar pattern for the preceding Early Iron Age could be envisaged. Cunliffe (1991, 101) concludes that in such an almost nomadic system, material culture and settlement archaeology are rarely well represented and regional as well as chronological distinctions are consequently difficult to define.

Even though both hoards from the Furness were found close to the known prehistoric site of Skelmore Heads it is not clear if there was contemporary activity in and around the hillfort and whether or not the deposition of the two hoards was in any way related. Extensive research excavations by Powell in the 1960s revealed at least two phases of occupation on Skelmore Heads, but objects associated with either phase are scarce and dating of the timber palisade and subsequent stone-baked enclosure is difficult (Powell 1963; Barrowclough 2010, 187). Some have argued that the timber enclosure dates from the Neolithic period while others suggested a Bronze Age date for the timber structures and a Later Iron Age for the stone enclosure, but there is not enough supporting evidence for either theory (Brown 1996, 13; Corcoran in Powell 1963, 17-20). There certainly is no evidence for on-site metal-working and if the axes from the two hoards as well as the axe from Dunnichen (no. 1245, Tayside, Scotland) were manufactured in the area, the lack of evidence suggests that metalworking took place off-site.

There is evidence from Scotland and the South of England, however, that Early Iron Age axe hoards were sometimes deposited on or close to earlier prehistoric sites, for example stone circles, burnt mounts or settlements (O'Connor 2007, 76). This means that if the first timber structures at Skelmore Heads predate the deposition of the axes it could be that the axes were manufactured and

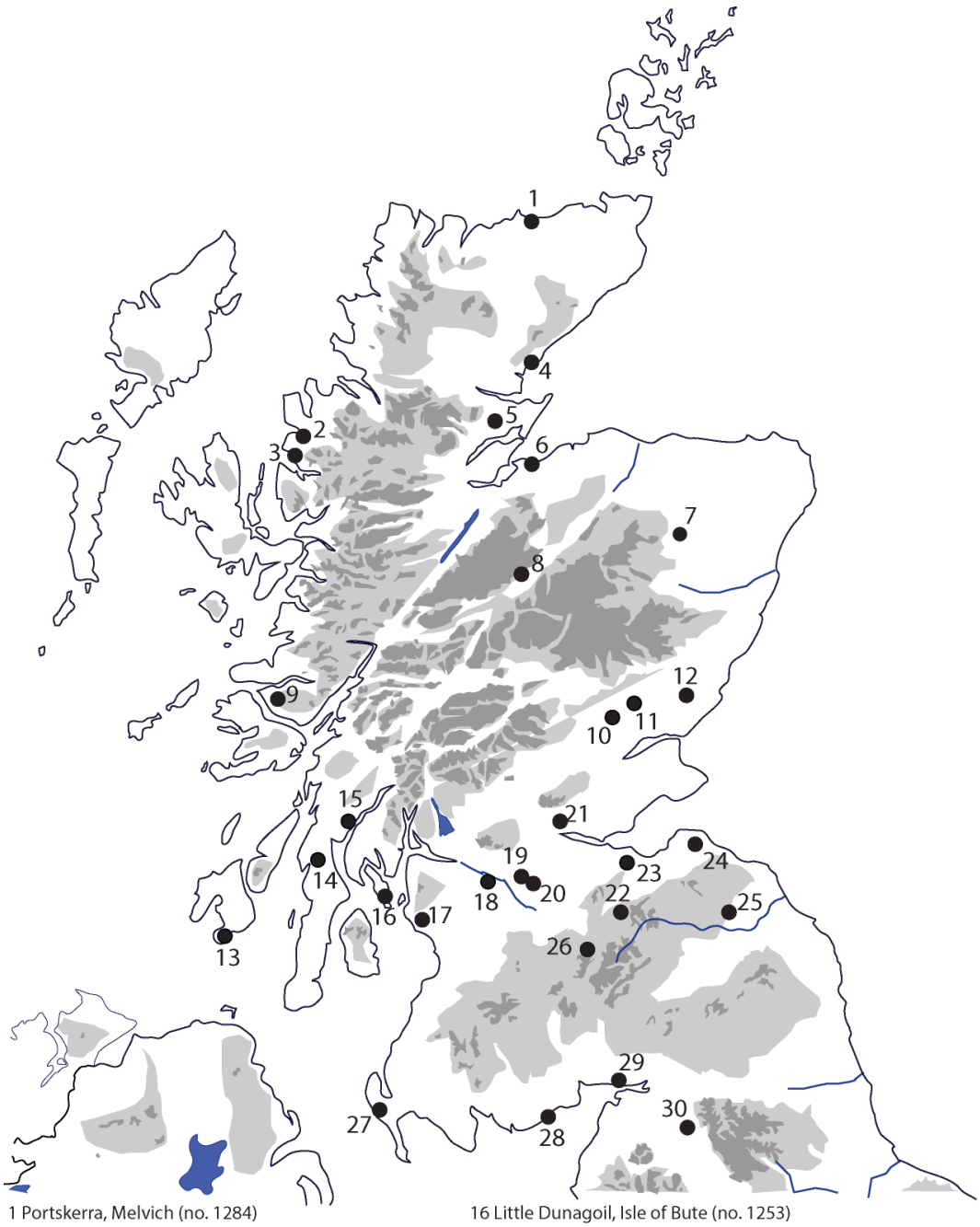
deposited deliberately within its vicinity. As a result it is probably the hillfort's significance as a remembered monument or as ancestral site rather than a contemporary settlement site which is important.

7.10. Scotland

There are three Early Iron Age hoards and 37 single finds of Early Iron Age socketed axes from Scotland (fig. 7.54). This number includes 3 moulds for socketed axes and 7 axes of unknown type, but excludes three axes which were recorded merely as having come from 'Scotland' (nos. 1338-1340).

	Number of axes in hoards	**Number of single finds**
Aberdeenshire	-	1
Angus	-	1
Argyll	-	6
Ayrshire	-	1
Berwick	-	1
Bute	-	1
Dumfries	-	2
Highland	-	1
Lanarkshire	-	6
Lothian	-	3
Morayshire	-	1
Peeblesshire	3	1
Perthshire	-	4
Renfrewshire	-	1
Ross & Cromarty	5	2
Stirlingshire	2	1
Sutherland	-	3
Wigtownshire	-	1

Figure 7.54: Scotland: Number of socketed axes (hoards and single finds)



1 Portskerra, Melvich (no. 1284)
2 Poolewe, Ross and Cromarty (nos. 1275-1279)
3 Gairloch, Ross and Cromarty (no. 1263)
4 Golspie, Sutherland (no. 1283)
5 Stittenham, Ross and Cromarty (no. 1280)
6 Culbin Sands, Morayshire (no. 1267)
7 Aberdeenshire (no. 1244)
8 Newtonmore, Highland (no. 1258)
9 Rahoy, Argyll (no. 1402)
10 Delvine, Perthshire (no. 1271b)
11 Cronan, Perthshire (no. 1271)
12 Craichie (Criche), Angus (no. 1245)
13 Loch Ard Achadh, Argyll (no. 1246)
14 North Knapdale, Argyll (no. 1249)
15 Loch Glashan, Argyll (no. 1248)
16 Little Dunagoil, Isle of Bute (no. 1253)
17 Ardrossan, Ayrshire (no. 1251)
18 Cardonald, Renfrewshire (no. 1274)
19 Bishop Loch, Lanarkshire (no. 1263)
20 Holytown, Lanarkshire (no. 1261)
21Ochil Hills, Tillycoultry (nos. 1254+1255)
22 Lamancha, Peebleshire (nos. 1268-1270)
23 Falcon Avenue, Edinburgh, Midlothian (no. 1265)
24 Traprain Law, Mitlothian (no. 1403)
25 Corsbie, Legerwood, Berwickshire (no. 1252)
26 Coulter, Lanarkshire (no. 1259)
27 Knock and Maize, Wigtownshire (no. 1286)
28 Auchencairn, Dumfries and Galloway (no. 1257)
29 Annan, Dumfries and Galloway (no. 1256)
30 Ainstable, Cumbria (no. 199)

Figure 7.55: Locations of Early Iron Age socketed axes (hoards and single finds) in the Northern England and Scotland

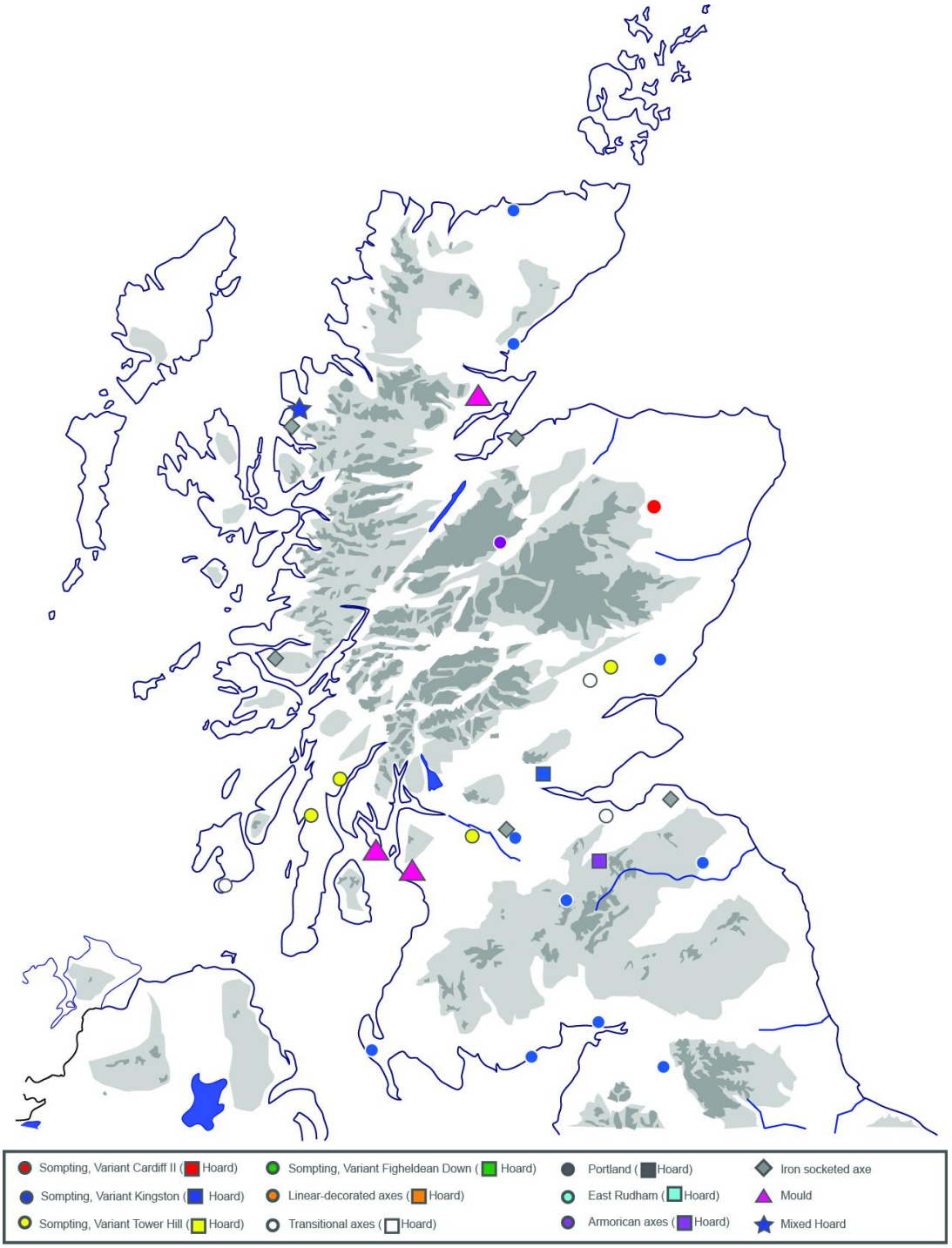


Figure 7.56: Distribution of Early Iron Age socketed axes in the Northern England and Scotland

The 37 unassociated socketed axes show a very wide distribution over all of Scotland, reaching even the far North and the Inner Hebrides. There are very few notable clusters and concentrations of axe types (figs. 7.55+7.56).

7.10.1. Scotland: Hoards

There are only three hoards containing Early Iron Age socketed axes from Scotland. These are the hoards from Lamancha (Peebleshire, nos. 1268-1270), Tillycoultry (Stirlingshire, nos. 1254+1255) and Poolewe (Ross and Cromarty, nos. 1275-1279, Plates 113-115). The hoards from Tillycoulty and Lamancha are axe hoards; the hoard from Poolewe is a mixed multi-period hoard.

The small hoard from Lamancha was made up of three Armorican axes which is a very unusual association coming from so far north. The main distribution of Armorican axes lies in the furthest south and south west of England and this so-called hoard from Lamancha must be considered suspicious. It is likely that the three Armorican axes were single antiquarian finds, having come either from the area or, more likely, from further south.

The hoard from Tillycoultry consisted of just two decorated axes of Sompting type, Kingston variant. They were discovered in a sand quarry in close but not direct association. This findspot was very close to a stone circle and associated Early Bronze Age cremation burials, which led O'Connor to believe that this was a deliberate choice and another example of Early Iron Age metalwork deposited in or near an ancient monument (O'Connor 2007, 76).

The deposition of metalwork near ancient monuments could possibly have the same or a similar significance as the deposition of multi-period hoards. While in one case socketed axes were deposited near an Early Bronze Age stone circle or burial, in the other case the axes were actually associated with artefacts that must have been considered ancient or at least old-fashioned at the time of deposition. An example for the latter is the third hoard from Scotland: Poolewe (Ross and Cromarty, nos. 1275-1279). In this hoard, three Sompting axes were associated with a transitional axe, an unidentified axe fragment, two cauldron handles, a copper-alloy ring and a very worn dress-fastener with cup-shaped terminals. The dress-fastener is the oldest object in the hoard and its advanced state of wear suggests that at the time of deposition it had been well-used and the cups were worn thin. Dress fasteners such as this date from the Late Bronze Age (c. 1000-750BC) suggesting that this particular example had been in use for up to 400 years before its deposition in the Early Iron Age.

7.10.2. Scotland: Single Finds

We currently know of 37 single finds of Early Iron Age socketed axes from Scotland. This number includes the three moulds for socketed axes of Sompting type from Little Dunagoil, Ardrossan and Stittenham (nos. 1251,1253 and 1280) and seven axes of uncertain type, but excludes three axes which were just recorded as from 'Scotland' (nos. 1338-1340).

The corpus of Early Iron Age axes from Scotland includes all major axe types except the regional types Portland, Blandford, Hindon, East Rudham and Sompting type, Figheldean Down variant (fig. 7.57). The majority of Early Iron Age socketed axes from Scotland can be labelled as Sompting type, Kingston variant axes, and as mentioned above, their distribution focuses on the Scottish Lowlands, with only two finds from the far north of the Highlands (no. 1283, Golspie; no. 1284, Portskerra). Their main distribution follows the coastline of the Irish Sea and the Solway Firth, complementing this Variant's distribution in the North West of England.

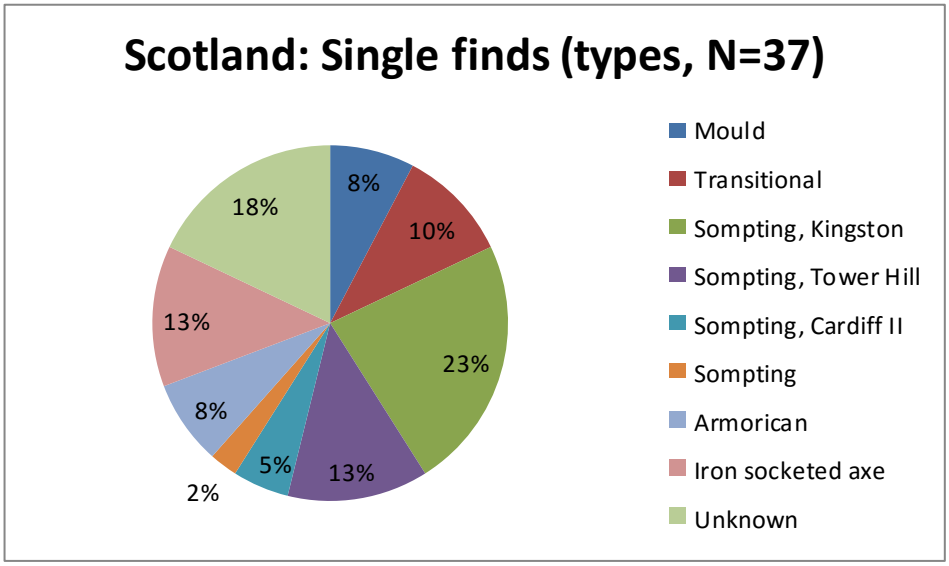


Figure 7.57: Scotland: single finds (types), N=37

The second largest number of Scottish Early Iron Age axes is that of iron socketed axes (five specimens) and axes of Sompting type, Tower Hill variant (five specimens). Even though most of the earliest iron metalwork from the British Isles was found in the Thames region and in the south, those five specimens from Scotland make up 25% of the corpus of earliest socketed iron

axes from Britain (no. 1263, Bishop Loch; no. 1267, Culbin Sands; no. 1281, Gairloch; no. 1402, Rahoy and no. 1403, Traprain Law, Plates 112+149). In contrast to socketed iron axes found in England and copper-alloy socketed axes in general, which were mainly deposited singly or in hoard contexts, four of the five Scottish iron axes were found on or near Iron Age settlement sites. This suggests that, compared with bronze socketed axes, Scottish early iron socketed axes may have had a different biography which resulted in a different mode of deposition. However, exact dating of early iron socketed axes is difficult and site evidence suggests that the axes from Rahoy and Culbin Sands may well date from later in the Iron Age (Rainbow 1928, no. 10; Manning and Saunders 1972, 285-6).

The two axe moulds from Little Dunagoil and Ardrossan were found on sites very close to each other on the west coast of Scotland (nos. 1251+1253; Plates 108+110. The closeness of the two findspots suggests that the area of North Ayrshire and Bute was perhaps a short-lived centre for axe manufacture in the Early Iron Age. Moreover, the findspots of the axe moulds, socketed axes of Sompting type, Kingston variant, and iron socketed axes strongly suggest a distribution via the sea considering that the majority of axes were discovered in locations along the west coast of North West England and Scotland.

7.10.3. Scotland: Contexts

The three Early Iron Age hoards from Scotland are very different in their contents and findspots. The hoard of three Armorican axes from Lamancha (Peebleshire, nos. 1268-1270) is a typical hoard in so far that Armorican axes are normally deposited with other axes of the same kind, but the association and findspot of this hoard are doubtful (Schmidt and Burgess 1981, 249). Most Armorican axes were found in the South and South West of England and there are only a few single finds north of the Thames.

The small hoard from Tillycoultry contained two decorated socketed axes of type Kingston which were deposited inside or near a stone circle and a number of Early Bronze Age cremations (O'Connor 2007, 74-9). O'Connor suggests that the place was deliberately chosen for the deposition of the axes because of the presence of the prehistoric monument and cemetery (O'Connor 2007, 76). The

search for a relationship with older sites is also seen in the scholarship associated with the largest of the Early Iron Age hoards from Scotland, Poolewe (Ross and Cromarty, nos. 1275-1279). Here, three Sompting axes were deposited with a smaller axe of Late Bronze Age or transitional nature (no. 1279, Plates 113-115) and a Late Bronze Age dress-fastener with cup-shaped terminals which was extremely worn at the time of deposition. However, the hoard was not deposited near an ancient monument, but on a hill overlooking a stream connecting Loch Maree and Loch Ewe. In this case therefore the findspot was probably not chosen for its obvious connection with the past but its relationship to water and the open sea. At a height of c. 170m the findspot is on dry land, but overlooking Loch Ewe whose waters empty into the Northern Minch and eventually into the open sea. It can be deduced therefore that the character of the findspot is similar to the character of other findspots of British Early Iron Age hoards which equally display a dual character with both wet and dry features, such as the East Anglian Fens and other British coastal sites.

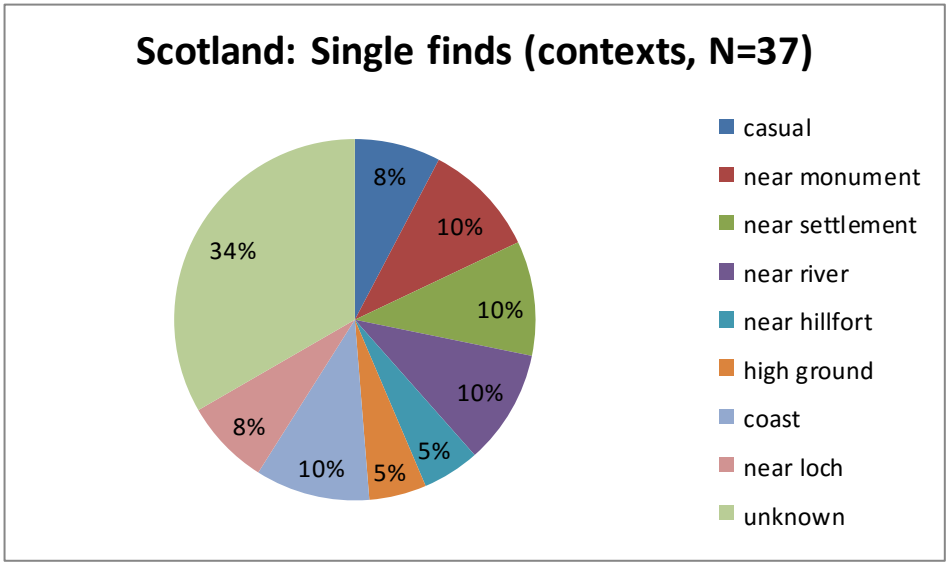


Figure 7.58: Scotland: single finds (contexts), N=37

The single finds mirror the diversity of the hoards' findspots (fig. 7.58). There is no single context that stands out. They all have in common that they are either near the coast or in the Lowlands and valleys. If axes were found on higher ground or in a mountainous area then their findspot is usually on a slope overlooking a loch or river (for example no. 1247, Crosshill, Argyll). Only 10%

were found to have been deposited near an ancient monument, for example no. 1257, Auchencairn Hill, Dumfries which may have been associated with the nearby cairns. Nevertheless, the findspot is also located close to the sea and with the diversity of findspots amongst the Scottish axes it can be challenging to extrapolate which aspect of a findspot was most important. And also, the plurality of different features accumulating in one location may well have been the attraction for why this location was chosen for the deposition of metalwork. However, the waterways along Scotland's coast were almost certainly used for trade and communication and so were focal points for settlement activity.

7.10.4. Scotland: Discussion

Compared to the region's actual size, Scotland yielded only a very small corpus of Early Iron Age socketed axes. The number of single finds (37) is comparable to that of the Southern region (33) but because of the size of the region the density of finds is much higher in the South than it is in Scotland.

There are only three hoards from Scotland, one of which is probably not a true association (Lamancha, Peebleshire, nos. 1268-1270). The other two are small hoards and included only seven axes overall (Tillycoultry, nos. 1254+1255: two axes; Poolewe, nos. 1275-1279: five axes). When compared to Southern England's 19 hoards containing more than 750 axes and East Anglia's 10 hoards with more than 120 axes, it is undeniable that the number of Early Iron Age socketed axes from Scotland is negligible.

The 37 unassociated socketed axes show a very wide distribution over all of Scotland, reaching even the far North and the Inner Hebrides. There are very few notable clusters and concentrations of axe types. There is perhaps a southern bias for axes of Sompting type, Kingston variant and a slightly central bias for axes of Tower Hill variant, but none of the other types show a concentration in a particular region. Both hoards and single finds share one common trait, however, which is that their individual findspots are either in the Scottish Lowlands or quite close to the coast. There are hardly any finds from the Scottish Highlands and even in the southern part of Scotland none of the axes were found on higher ground or in the upland areas.

There is a small cluster on the west coast where two of the three moulds were found quite close together (nos. 1251, Little Dunagoil; 1253, Ardrossan), but the third was discovered at the other end of the country in the far North (no. 1280, Stittenham, Plate 116). Coles suggests that in the light of the discovery of three sets of moulds for the casting of decorated socketed axes of Sompting type (nos. 1251: Ardrossan, Ayrshire; 1253: Little Dunagoil (Bute); 1280: Rosskeen, Ross and Cromarty) Scotland was most probably not only the recipient of decorated socketed axes, but also host of at least three of their production sites (Coles 1962, 36-7). In connection with this it is noteworthy that there are only two moulds for Sompting axes from England (nos. 640: Melcombe Horsey, Dorset, Plate 30; 1409: Ham Hill, Somerset). However, none of the moulds were found in regions with the greatest concentrations of Sompting type axes which are the Thames Valley and East Anglia.

The distribution of Kingston variant axes in the North West of England and Scotland strongly suggests a connection between the two regions in the Early Iron Age. Even though the moulds for Sompting type axes have only been found in Scotland (see above), there is metalworking evidence from the Furness, where a piece of casting residue was found in a hoard with three socketed axes (Ulverston, nos. 1395-1397). Furthermore, the two decorated axes from Ulverston were made in the same mould or from the same mould template as one of the axes from the older hoard from the Furness (Skelmore Heads, no.193) and a single find from Scotland (Dunnichen, Tayside, no. 1245), and even though no mould was found in the Furness, the metalworking evidence suggests that all four axes were made in the Furness peninsula. In addition to the inclusion of a small fragment of metalworking debris in the Ulverston hoard, one of the axes from Ulverston (no. 1395) and the axe from Skelmore Heads (no. 193) were deposited in as-cast condition while the axe from Tayside (no. 1245) shows clear signs of wear and re-sharpening on both the upper and lower surfaces of the body. This suggests that it probably had a longer ‘life’ than the two axes from the Furness where never finished. Their findspots do not give any indication as to where the axes were originally made. The axe from Dunnichen was deposited ‘casually’ that is in no specific location,

while the axes from the Furness were deposited close to an ancient monument (Skelmore Heads).

In terms of findspots Scotland diverts from the general trend: while in the other regions watery or wet contexts played a major role in the deposition of Early Iron Age socketed axes and hoards, the choice of findspot in Scotland is far more diverse. Due to the nature of Scotland's countryside and the location of its prehistoric settlements, most of the depositions were made near the sea or a river or loch, but it seems that in some cases there may have been additional reasons for the choice of location, such as a nearby a cup-and-ring-marked stone (no. 1250: Portalloch, Argyll) or a cairn (no. 1257: Auchencairn Hills, Dumfries). The findspots of Early Iron Age metalwork in Scotland therefore suggest that the proximity of ancient monuments, settlements or cemeteries was considered significant in the choice of place of deposition.

7.11. Conclusion

The eight regions are each characterised by different contexts, associations and axe types. While the South West and South Wales's stand out through a high concentration of Armorican axe hoards and mixed hoards with Continental ties, the South East is characterised by a sharp decrease in metalwork deposition from the Late Bronze Age, yielding only 3 hoards and 4 single finds (figs.7.59+7.60).

The Thames Basin shows the highest number of single finds, most of which were dredged from the Thames and include an unusually high number of early iron socketed axes. In East Anglia, two clusters are clearly noticeable: one area of deposition of single finds and small hoards including two or three axes along the Fen edges and another small cluster of hoards of East Rudham type axes – all within in the Foulsham area of Norfolk.

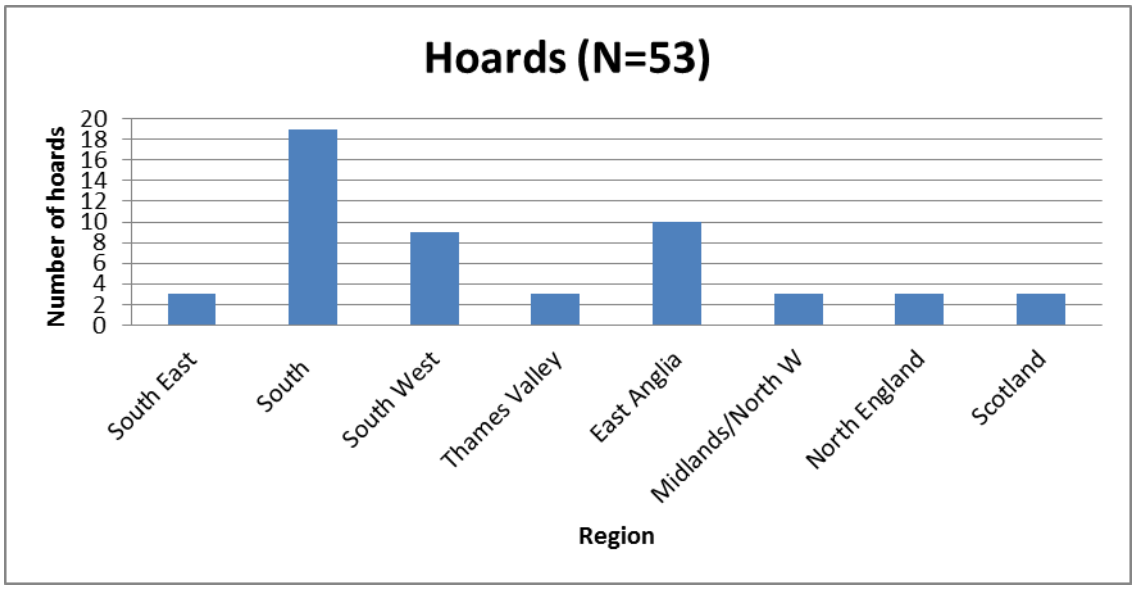


Figure 7.59: Distribution of Early Iron Age hoards including socketed axes in the eight regions

While the Midlands and North Wales, Northern England and Scotland are, in relation to their individual sizes, all characterised by small numbers of single finds and hoards, more than half of the entire corpus of Early Iron Age socketed axes was discovered in the South (figs 7.59, 7.60+7.61).

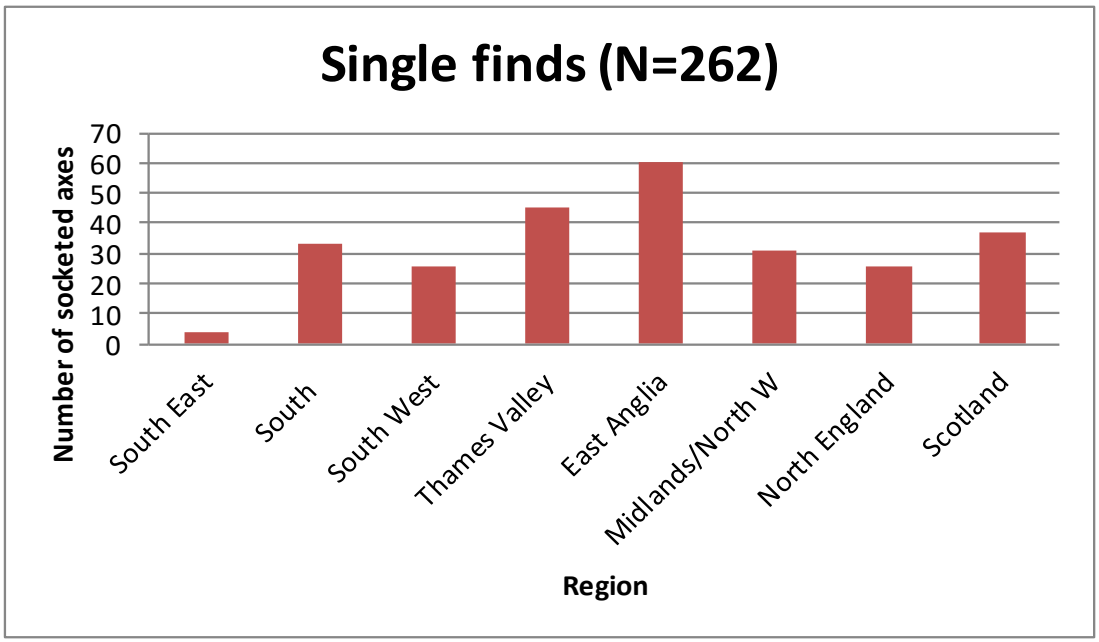


Figure 7.60: Distribution of single finds of Early Iron Age socketed axes in the eight regions

The South also shows the greatest diversity of axe types offering examples of every type except East Rudham type. Having the largest number of hoards (19), the South also offers the greatest diversity in contexts and associations including pure axe hoards, axe dominated hoards, mixed and multi-period hoards, while the other regions only offer hoards of one type or association.

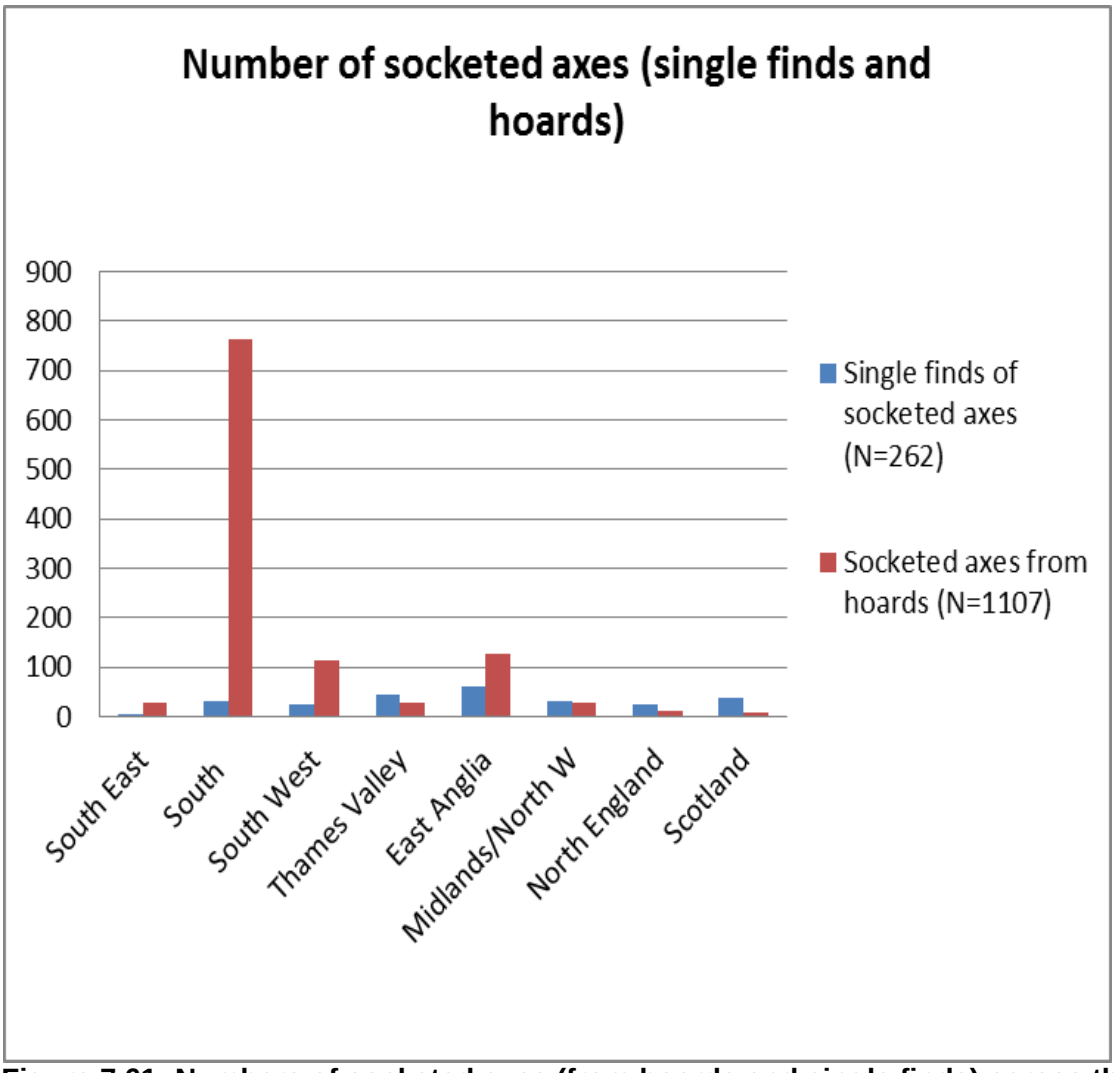


Figure 7.61: Numbers of socketed axes (from hoards and single finds) across the eight regions

Chapter 8

Discussion and Conclusion

8.1. Introduction

This final chapter summarises the key findings of this research on the Early Iron Age socketed axes of Britain. It then moves on to broaden out the discussion on these objects to reflect on the differences between bronze and iron and the visual characteristics of these objects. This is followed by a consideration of the socketed axes not just as functional objects but as material culture which had the ability to fulfil a variety of different roles within society. This concluding chapter will reconnect Early Iron Age socketed axes with the people who made them, used them and finally disposed of them, deliberately or accidentally, in secrecy or in front of an audience. Some ideas are presented which suggest ways in which this research could be expanded in the future for gaining a greater understanding of people and society in Early Iron Age Britain.

8.2. Summary of findings

This first section provides short summaries of the results of the analysis of the Early Iron Age socketed axes of Britain which have been presented in chapters 5, 6 and 7.

8.2.1. Socketed axes: a new typological scheme

This thesis has introduced, defined and discussed twelve types of socketed axes. While the transitional type can be dated to the Late Bronze Age-Early Iron Age transition (c. 900-700BC), the remaining eleven types can be dated to the fully developed Early Iron Age (800-600BC).

The research has redefined and sub-divided the two known Early Iron Age types, linear-decorated axes and Sompting type axes as defined by Burgess (1971), Moore and Rowland (1972, 30) and Burgess and Schmidt (1981), and introduced a Transitional type for axes of the Late Bronze Age-Early Iron Age transition.

This thesis then presented axe types related to linear-decorated axes (East Rudham and Blandford type axes) and defined the new Portland and Hindon types which are also related to East Rudham and Blandford type axes. Chapter 5 introduced a subdivision of Sompting type axes into four variants: Kingston, Tower Hill, Cardiff II and Tower Hill. Schmidt and Burgess' original Sompting variants, Roseberry Topping and Gembling variants, have been dismissed as no longer acceptable (Schmidt and Burgess 1981, nos. 1632; 1645). Two types (Armorican type and iron socketed axes) and their definitions were retained but find numbers were updated (Rainbow 1928; Manning and Saunders 1972; Briard 1965, 247-50; O'Connor 1980, 235; 2007).

Figure 8.1: Transitional type axe from Lackford, Suffolk (no. 977)

Socketed axes that come under the label 'Transitional' belong to the Late Bronze Age-Early Iron Age transition when socketed axes started to change in shape and decoration (fig. 8.1). They display limited decoration and definite signs of wear. The presence of a Transitional axe type demonstrates that there was no gap between the indigenous Late Bronze Age and Early Iron Age bronze axe industries. Early Iron Age socketed axes were not introduced from elsewhere nor were they alien to the United Kingdom and they find their predecessors in the socketed axes of the Ewart Park metalwork assemblages of the British Late Bronze Age.

Sompting type axes are the most recognisable Early Iron Age axe type (fig. 8.2). The four variants defined in this thesis are based on their individual decoration, shape and weight. Sompting axes of Kingston and Tower Hill variants share the same size and shape with widely-splayed crescent-shaped blade, axes of the Kingston variant often show an elaborate, unique decoration, while axes of the Tower Hill variant are mostly undecorated or displaying minimal decoration. Both types normally show just some signs of wear; they are rarely extremely worn. They differ from Sompting axes of Cardiff II and Figheldean Down variants in their overall shape with Cardiff II and Figheldean Down variant axes having a very narrow cutting edge and almost parallel sides. Axes of Cardiff II variant are almost always decorated with a simple rib-and-pellet decoration normally made up of four or five ribs ending in very small pellets while Sompting type axes of Figheldean Down variant are almost always simply ribbed.

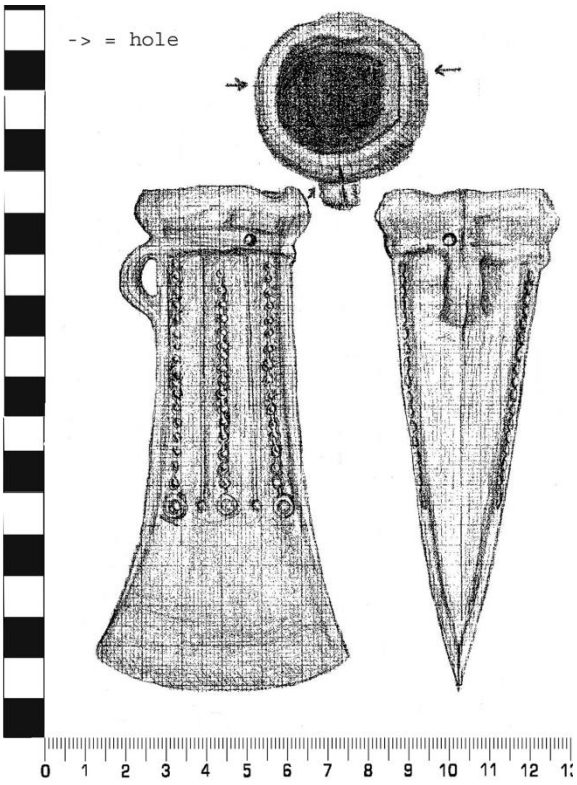


Figure 8.2: Sompting type, Kingston variant axe from Lakenheath, Suffolk (no. 978)

While Sompting type axes are large and heavy, socketed axes of Portland, East Rudham, Blandford and Hindon type are small and thinly cast. Hindon type axes are undecorated with a shiny silver surface while Portland type axes are decorated with a simple rib-and-pellet ornament. Both Blandford and East Rudham type axes display linear-decorated facets, but Blandford type axes are slightly larger and almost triangular in shape. The small axes are regions specific with Portland and Blandford type axes limited to Dorset and Wiltshire, East Rudham axes limited to Norfolk and Hindon type axes so far known only from Hindon, Wiltshire.

East Rudham type axes are related to linear-decorated axes. They share the same size and the same ornament. Linear-ornamented axes, however, show signs of use and wear while East Rudham type axes do not. Portland, Blandford and Hindon type axes were also always found in as-cast condition.

While axes of these smaller types were often made from an alloy with high tin content, Armorican type axes are characterised by their high lead content. They originate from Brittany, but many finds come from Northern France and Southern Britain. They are always heavy, have narrow bodies with parallel sides and narrow blades. Except for the Brandivy variant, they are always undecorated and have a very pronounced sub-rectangular (back-to-front) mouth. The number of socketed iron axes is small: only 20 provenanced specimens are known, most of them from England. They were all made from sheets of wrought iron.

8.2.2. Exploring the context of socketed axes

More than three quarters of Early Iron Age socketed axes were found in association with other metalwork. The composition of Early Iron Age metalwork hoards is very different from the composition of traditional Late Bronze Age hoards which often include heavily used, broken-up weapons, tools and ornaments. In contrast, Early Iron Age hoards always include complete artefacts in good or as-cast condition. Some hoards are collections of artefacts spanning hundreds of years, others also include iron artefacts. However, only one quarter of Early Iron Age hoards include objects other than socketed axes making socketed axes the single most dominant artefact type deposited in the Early Iron Age. Early Iron Age hoards can be divided into two main groups: axe hoards and mixed hoards which in turn can subdivided (figs. 8.3-8.8):

1. Axe Hoards
    a. *Axe Hoards*
    b. *Axe-Dominated Hoards*
2. Mixed Hoards
    a. *Mixed Hoards (i.e. with contemporary objects)*
    b. *Multi-Period Hoards (i.e. with curated, older objects)*
    c. *Fragmented Hoards*

Figure 8.3: One half of the Figheldean Down hoard (Wiltshire, nos. 1041-1050): an example for a pure axe hoard

While the differences between axe hoards and mixed hoards are very distinctive, the differences between axe hoards and axe-dominated hoards and mixed, multi-period and fragmented hoards are more subtle.

Axe hoards are hoards that are solely composed of socketed axes and socketed axe fragments. Nearly three quarters of all Early Iron Age hoards can be classed as axe hoards. Normally axes in these hoards are of one type only. Cross-overs of different axe types are very rare, but they do occur, especially between closely related types, such as socketed axes of Sompting type, Kingston and Tower Hill variants and Portland and Blandford type axes.

In axe-dominated hoards, socketed axes are mixed with small quantities of other items of contemporary metalwork:

1. Objects relating to horse riding and carts (harness rings, phalerae, horse bits, cheek pieces and pole caps)

2. Objects relating to eating/feasting (cauldrons)

3. Weapons (mainly spearheads and, very rarely, sword fragments)

4. Tools (especially socketed gouges, socketed leather-working knives and sickles)

5. Ornaments (bangles, bracelets)

Figure 8.4: The Tower Hill hoard (Oxfordshire, nos. 932-953): an example for an axe-dominated hoard

In contrast to axe hoards, mixed hoards are composed of less than 50% of socketed axes. In our two mixed hoards (Cardiff II and Llyn Fawr, Glamorgan), socketed axes are associated with a large variety of other metalwork, especially tools. The two mixed hoards from South Wales were found in the same geographical area as several socketed iron axes (Penllyn Moor) and near the feasting and midden site of Llanmaes. At the site of Llanmaes socketed axes of Armorican and Sompting variants were found in association with remains of Early Iron Age cauldrons and fragments of other, smaller contemporary vessels as well as dress ornaments and pins.

Figure 8.5: The Cardiff II hoard (Glamorgan, nos. 1292-1293): an example for a mixed hoard

Another small group of mixed hoards are the four multi-period hoards from Wiltshire, Hampshire and Ross & Cromarty. These hoards contain few axes but provide a unique context in which Early Iron Age axes are associated with artefacts dating from the preceding Early, Middle and/or Late Bronze Age periods as well as succeeding Middle and Later Iron Age periods. Amongst the hoards of this small group, the Salisbury hoard stands out both because of the addition of later material and the later date of re-deposition, but also because of the addition of a large number of Portland type axes and a single axe of Sompting type, Figheldean Down variant. Axes of these two types are not

normally found in association with any other metalwork. Their inclusion in the Salisbury hoard suggests that the Salisbury hoard was deposited by people who had collected artefacts not only from their own region but also the nearby counties of Dorset and Hampshire and (re-)deposited them after discovery in a context specific to their own culture. This means that these Early Iron Age communities that deposited these hoards must have felt enabled to define some artefacts as ancient and that these alien and ancient artefacts must have had some significance because they influenced the actions and reactions of people who re-deposited them after discovery (Hingley 2009, 144).

Figure 8.6: The Vale of Wardour hoard (Wiltshire, nos. 1388-1392): an example of a multi-period hoard

The third type of the mixed hoard category are fragmented hoards which are hoards composed of more than 90% of broken up metalwork. The only fragmentary hoard amongst the corpus of Early Iron Age hoards is the assemblage from King's Weston Down (Bristol) which, compared to the other Early Iron Age hoards is very unusual in character and composition. It is very uncommon to find extremely worn and broken-up artefacts and fragmented objects in Early Iron Age hoards. The inclusion of fragments and worn-out and

broken tools in bronze metalwork hoards is much more characteristic for Late Bronze Age hoards from Kent and East Anglia (Pendleton 1999; Turner 2010, 67f.).

Figure 8.7: The Kings Weston Down hoard (Bristol, nos. 54-73): an example for a fragmented hoard

8.2.3. The location of socketed axes

In terms of depositional contexts this research suggests that there is no overall preference for the deposition of Early Iron Age socketed axes in a specific context, such as near a river, a settlement or a monument. However, it is evident that wet contexts or contexts near water were preferred, indicating the significance of contexts that were neither completely wet nor completely dry. For the majority of Early Iron Age axes, the chosen places of deposition were on the edges or the limits of wet areas rather than places fully submerged in the

water. This means, for example, that the Fen edges were preferred to the Fens and a cliff overlooking the coast or a river was preferred to the sea or the river itself.

The depositional context of Early Iron Age hoards containing socketed axes was different from the deposition of single finds of Early Iron Age socketed axes: while hoards were often found in retrievable places, single finds were not. This suggests that the places of deposition for single axes were not randomly chosen places near water, but places where the deposition was secure, that is irretrievable for the depositor and others. The East Anglian Fens, the marshy areas around the Thames and the Trent as well as the Yorkshire Carrs may therefore have been considered ideal places for metalwork deposition. The waters would have been murky and the ground very boggy and muddy: it would have been extremely difficult to retrieve an axe once deposited. Floodplains and fords were not favoured as places for deposition, possibly because items were retrievable, not only by the depositor but also by everybody else.

A much smaller number of axes were found in the vicinity of a prehistoric monument or near a known settlement. None come from inside a known Early Iron Age settlement or monument.

Hoards deposited in the vicinity of ancient monuments bear similarities with multi-period hoards, but while in multi-period hoards it is their contents that are connected with the past, with hoards deposited near ancient monuments or settlements it is the place of deposition (Hingley 2009, 145). The idea of earlier prehistoric artefacts reused in a later prehistoric context or later prehistoric artefacts deposited near earlier prehistoric monuments raises the question what prehistoric people made of their own past and that of their forbearers. They clearly did not see the artefacts in multi-period hoards as an obvious source of recyclable materials, but as artefacts that needed to be either curated or reburied or both. In the same way, they did not ignore the monuments of past people, but included them in their own ritual metalwork deposition as the preferred location for the deposition itself.

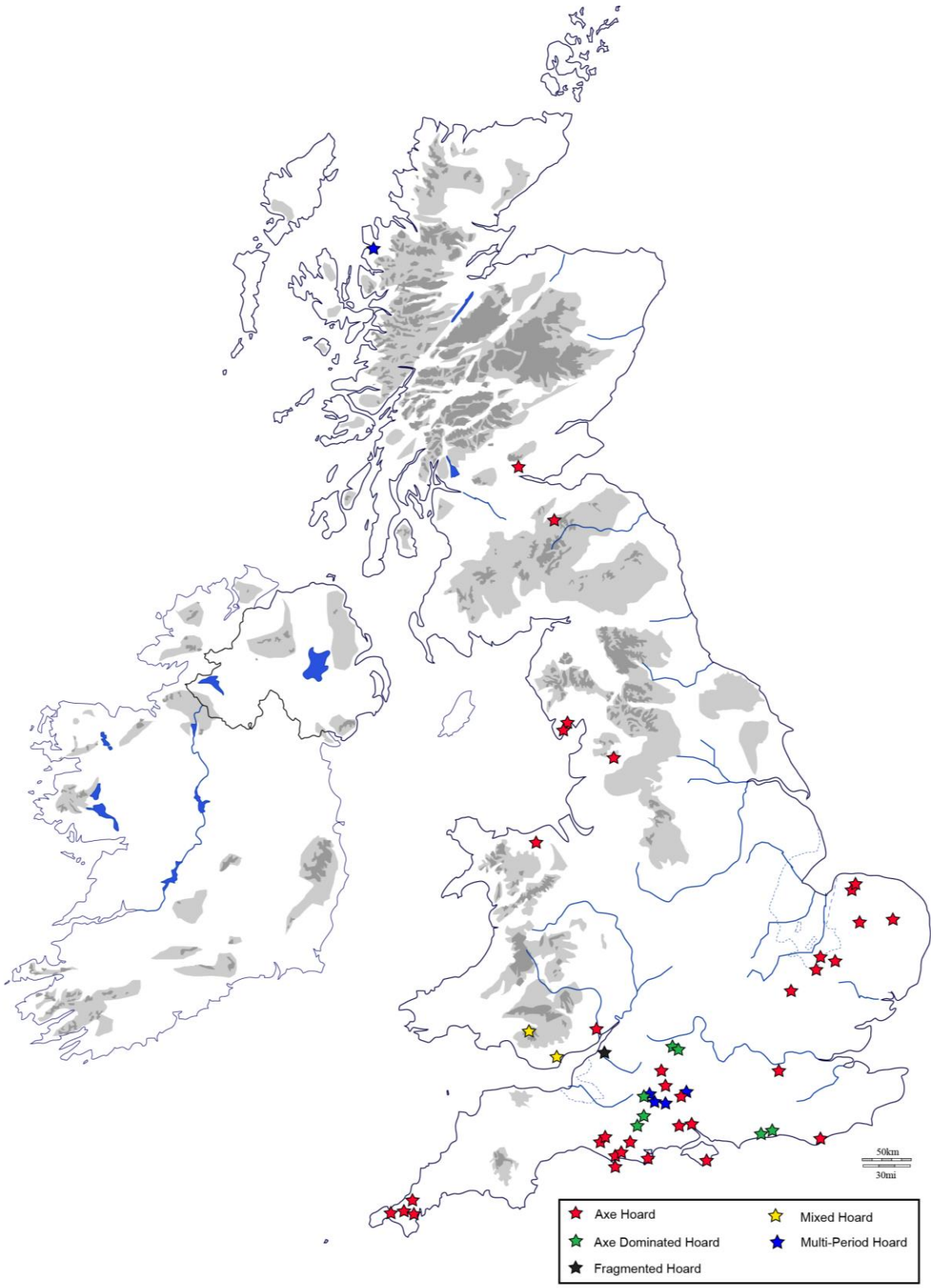


Figure 8.8: Distribution of axe types

8.2.4. Regional differences in socketed axe production and deposition

British Late Bronze Age and Early Iron Age axes have universal attributes but their variations are often regionally specific – so the idea of an axe was universal but they were made and consumed locally using regional types and shapes.

The eight Early Iron Age regions outlined in this thesis are defined by different contexts, associations and the predominance of different Early Iron Age axe types. While the South West and South Wales stand out through a high concentration of Armorican axe hoards and mixed hoards with Continental ties, the South East is characterised by a sharp decrease in metalwork deposition from the Late Bronze Age, yielding only 3 hoards and 4 single finds (fig. 8.9). The Thames Basin shows the highest number of single finds, most of which were dredged from the Thames and include an unusually high number of early iron socketed axes. In East Anglia, two clusters are clearly noticeable: one area of deposition of single finds and small hoards including two or three axes along the Fen edges and another small cluster of hoards of East Rudham type axes – all within in the Foulsham area of Norfolk.

While the Midlands and North Wales, Northern England and Scotland are, in relation to their individual sizes, all characterised by small numbers of single finds and hoards, more than half of the entire corpus of Early Iron Age socketed axes was discovered in the South. The changes of metalwork deposition, a fresh influx of foreign bronzes and the construction of larger hillfort settlements with substantial defences in Western Central Europe and Belgium are mirrored in Britain, especially in the South (Cunliffe 2004; Sharples 2010), where we also see a huge change in metalwork deposition at the time. The South also shows the greatest diversity of axe types offering examples of every type except East Rudham type. Having the largest number of hoards (19), the South also offers the greatest diversity in contexts and associations including pure axe hoards, axe dominated hoards, mixed and multi-period hoards, while the other regions only offer hoards of one type or association.

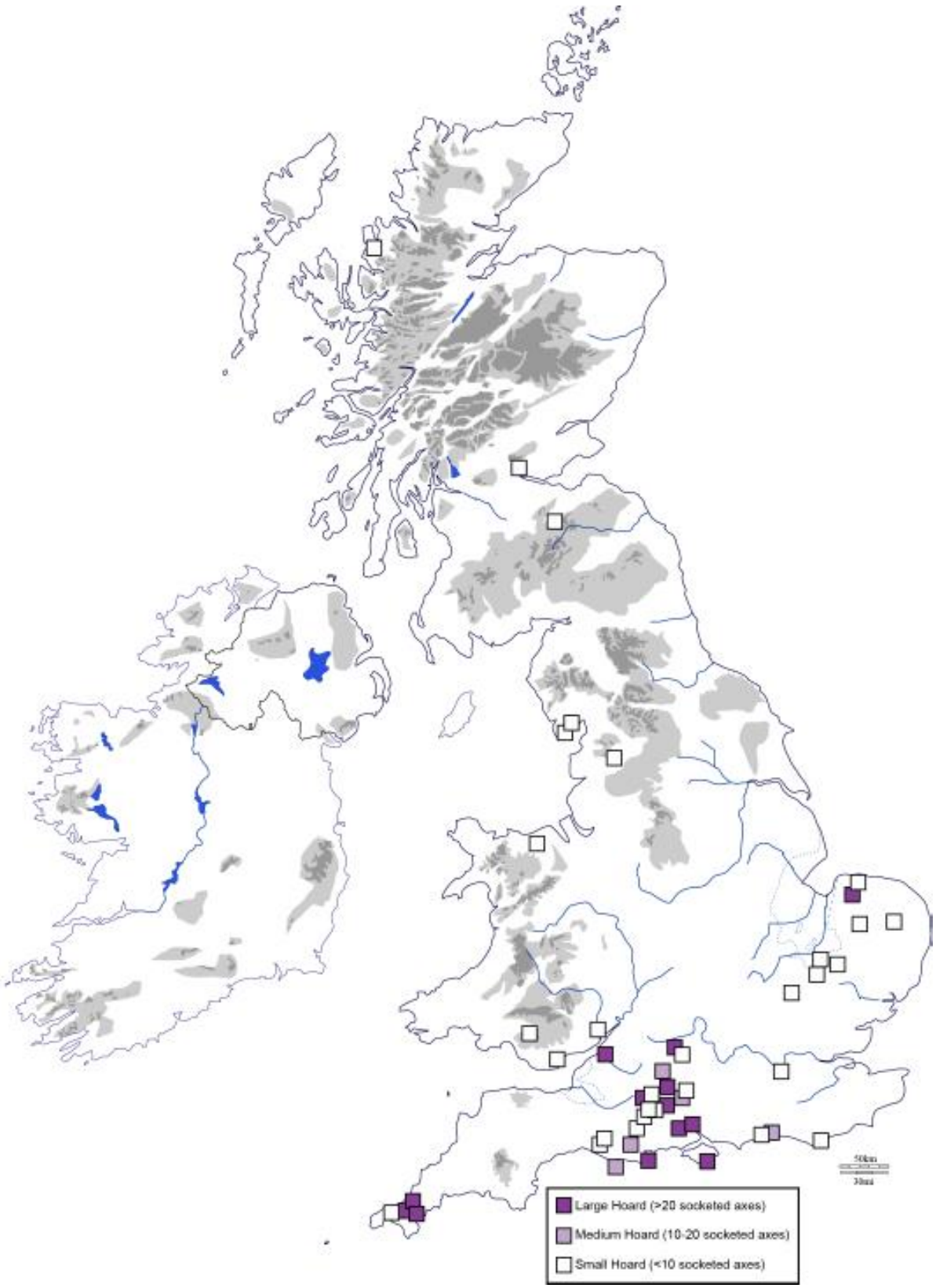


Figure 8.9: Concentrations of socketed axes within the regions and each individual hoard

Hoard composition had changed dramatically from the Late Bronze Age to the Early Iron Age and this drastic change in hoard composition was accompanied by an equally drastic change of regional focus: the focus of deposition had now shifted from South East England, Yorkshire and South Wales to Wessex. This regional shift in metalwork deposition either indicates an innovation or a change in behaviour and tradition in these new centres (where metalwork deposition on a larger scale was previously unknown) that went hand in hand with the sudden reduction of metalwork deposition in South East England. The only area that remained as popular for the deposition of metalwork hoards as ever is East Anglia, especially in the area of the Fen edges.

8.3. Wonderful things: the visual characteristics of socketed axes

The changes in looks and shape, and consequently the adaption of a new and improved typology of socketed axes in the British Early Iron Age will have been accompanied by a change in conceptualisation and the overall meaning of socketed axes.

The eleven types of Early Iron Age socketed axes display a great variety of decoration, shape, size, weight and colour. For the first time since the transition from Stone Age to Bronze Age, there was a choice in material: in the Early Iron Age we find the first copies of bronze socketed axes made in the previously unknown material, iron. However, iron socketed axes would never reach the sophistication of their bronze counterpart which is why the majority of Early Iron Age socketed axes were still made from cast bronze (1389) with only a small number of axes made from wrought iron (24).

In the beginning of the Early Iron Age, iron was treated exactly like bronze. This means that Late Bronze Age metalworkers attempted to cast iron like bronze in moulds which was not successful because the melting point of iron (c. 1500C) is much higher than that of copper (c. 1100C) and bronze (900-1000C). Metalworkers then tried to replicate socketed axes using hammered, folded over sheets of iron with separately attached loops or holes punched through the iron sheets to act like a loop. Even though some of these attempts were successful (e.g. no. 685: Thames, London, and no. 1328: Penllyn Moor, Glamorgan), iron socketed axes were extremely short lived, proven by the small

number of only 24 surviving specimens. The low survival rate of iron socketed axes may be attributed to the metal's much more rapid degradation and poor survival in the ground, thus resulting in a much smaller number of specimens recovered after nearly 3000 years.

However, the comparatively high number of surviving bronze axes is very likely to reflect a true difference in numbers of bronze and iron socketed axes in circulation at the time. The reason why iron axes did not replace bronze axe with greater urgency almost certainly lies in Early Iron Age peoples' growing desire to decorate axes with more and more elaborate decoration, either using moulded, raised decoration, or a different metallic sheen. At the time this kind of advanced metallurgy was not possible with a new material whose properties people knew little of; however, after over two millennia of working with bronze, metalworkers had become experts in manipulating copper alloys.

While Late Bronze Age axes are plain or simply ribbed, almost all Early Iron Age socketed axes are decorated with ribs, ribs-and-pellets or ribs-and-circlets, especially socketed axes of the Kingston and Cardiff II variants of the Sompting type. Slightly more extravagant variations include rib-and-multiple-circlets, bundles of ribs terminating in pellets, double-rib-and-circlets and the basic rib-and-pellet ornament with herring bone lines between the ribs. Some socketed axes of Sompting type display even more elaborate patterns, like box-shapes or the unique Omega-shape which can be found on the axe from Kingston (Surrey, no. 991, Plates 69-70).

This very sudden adoption of elaborate decoration on socketed axes and the drastic change in their size, shape and weight which went along with it, indicates a radical change in the perception of socketed axes and a much wider adaptation of modes of use during the transition from the Late Bronze Age to the Early Iron Age. In a very short period at the during the transition from Late Bronze Age to Early Iron Age socketed axes were modified to meet the demands of purposes other than woodwork. The sudden appearance of decoration is a clear indicator of that change: socketed axes must have been on display; they were looked at and noticed – they had transformed into an artefact used while being surrounded by an audience. The décor applied to axes all of the sudden included very individual patterns which changed them into much

more individual items: the decoration of Early Iron Age axes of Sompting type showed off their uniqueness and individuality.

However, even though there are many different patterns, all decorated British Early Iron Age socketed axes display an ornament that is invariably related to the basic ribbed, rib-and-pellet or rib-and-circlet design seen very prominently on axes of Sompting type, Cardiff II variant. This conservative and surprisingly wide-spread employment of a very simple decoration indicates the importance of the motif and its strong, almost permanent connection to the appearance of the socketed axe. Like their bulbous mouth mouldings and the small side loop, their rib-and-pellet or rib-and-circlet designs were inherently linked to how a socketed axe was perceived and what an axe was, being as much a part to the fabric of the object as the bronze used to make it. The slight variety in style may indicate individual owners who requested, though keeping the style similar in general, individual ornaments on their axes. This would suggest that the decoration was meaningful to the axe's owner and those who saw it.

This is very different for socketed axes of Portland, Blandford, East Rudham and Hindon types. While Sompting type axes of Kingston and Cardiff II variants are often unique specimens, axes of these smaller types are extremely similar although the individual types can be differentiated by their different designs. Furthermore, in these smaller types, the axes' distinctiveness is not only reflected in their decoration but also in some of the axes especially chosen silver surface colour (Meeks 1993a; 1993b; Roberts et al forthcoming, 8).

The aspect of a deliberately engineered colour change in prehistoric metalwork has rarely been addressed in discussions of bronze metalwork. It was assumed that even though bronze metalwork is, when recovered, of green, brown, black or dull golden colour, it would have initially been of an even dark golden colour. None of the Late Bronze Age axes show any alteration of this colour. In the Early Iron Age, however, the shiny silver surface colour can be seen on axes of Portland, Blandford, East Rudham and especially Hindon types as well as on a small number of Sompting type axes making them resemble freshly made iron axes – albeit with a smoother surface and an intricate decoration.

Colour is a significant aspect of every object used by people (Jones and MacGregor 2002): it is probably what people would notice first when they see

an object and it may be the reason why they pick it up or not. Furthermore, colour can indicate whether they are allowed to touch it or not; it can mark an object as off-bounds. Colour is a powerful visual stimulus and must not be underrated. Hurcombe (2007, 115) suggested that we have not appreciated the subtle use of colour on the surface of archaeological objects in the past. However, due to metal corrosion in the ground and the resulting change of an object's surface colour it is often not possible to see what colour the surface was initially intended to be. Thankfully, not all axes of Portland, Hindon and East Rudham types were affected by corrosion and most of them still retain patches of their original surface area with only minimal patination. The question arises why the colour of these axes was changed and why the surface was made to look silver. Silver was not well-known or used in the Late Bronze Age and Early Iron Age and no silver objects were in circulation. However, during the transition period people started to use iron and a finished iron object will have a shiny silver surface. The novelty of a metal object with a silver surface may have sparked the desire to cast silver socketed axes. That, of course, is impossible because socketed axes were made from copper alloy which cannot be alloyed with iron. However, through tin enrichment during the casting process socketed axes can be given a silver surface. The casting would not necessarily result in a usable tool but the axe would end up having the desired silver surface. Effectively, it would be a socketed axe that very much looked like it was made from the new metal iron.

While the colour of the new metal may have been more desirable in the first place, metalworkers tried hard to stick with the traditional shape of tools when it came to working the new metal iron. Thus, the first iron socketed axes were made in the image of cast copper-alloy socketed axes, even though the shape of the socket does not suit the properties of iron at all (Hingley 1997, 14-15). It was easier to fold over the sheet of iron and create an axe resembling a shaft hole axe (Manning and Saunders 1972, 279). However, socketed axes had been around for more than a century before they achieved the final shape of the Bronze Age axe – abandoning this shape and, effectively, making an axe that again resembled Neolithic and Early Bronze Age shaft hole axes may have taken some time to get used to, although recent evidence from Shepperton

(Surrey, no. 1408) suggests that shaft hole axes had never quite gone out of fashion (Needham 2012, 43-45).

Thus, skeuomorphism was visible in both bronze and iron Early Iron Age socketed axes. The deliberate application of a silver surface to Portland, East Rudham, and most of all, Hindon type socketed axes show the appreciation people must have had for the new metal and the new look that it would have brought with it. Iron socketed axes have no decoration perhaps indicating that at this early stage of iron-working, and without the ability to cast it in moulds, such fine decoration was impossible (Manning and Saunders 1972, 279). However, after more than two millennia of accumulation of bronze-working knowledge it was possible to use the properties of a certain high-tin alloy to create socketed axes with a surface that shone like silver not dissimilar to that of freshly wrought iron, whilst also incorporating the desired rib-and-pellet or linear-ornament on the axes' faces.

The only axe type that does not reflect the growing desire of decoration and a change in surface colour are Armorican axes. Armorican axes are generally considered the archetype of axe ingots, characterised by heavy weight, extremely narrow blades and parallel sides (Briard 1965; Bradley 1990, 119), their shape eponymous with their alloy and the malleability of the metal. Their metallurgy suggests a high lead content, setting them apart from the other axe types that have been identified as axe-shaped ingots in the past: Blandford and Portland types (Pearce 1983, 120-121; 253). Portland axes have a high tin content (11.46-22.96%) but they are not ingots as Pearce suggests (1983, 120-121). Their very limited geographical distribution suggests otherwise. While Armorican axes have an extremely wide distribution, spread over large areas of Northern France and Southern England and Wales, Portland and Blandford axes were almost exclusively found in Dorset and East Rudham type axes were only found in Norfolk. Axes of Hindon type have only been discovered at one site so far. These very individual regional distributions suggest a very regional use rather than a wider-reaching trade network in which these axes played the role of tin ingots. They do not seem to be obvious candidates for trade or currency (Roberts *et al* 2015).

But if they were not tools, weapons or ingots, what was the purpose of these small, brittle axes on the one hand and the large, elaborately decoration Sompting type axes on the other? Many objects have both an expressive and a practical aspect meaning that an object's use and its appearance during handling was important. Indeed, looks may have defined its use to some extent (Brück 2007, 282). Thus, some objects that looked like tools to us were tools but not as we understand them (Hurcombe 2007, 5). This indicates that the very idea of a tool depends on contexts and is society-specific. The metallurgy of Portland type axes with some specimens cast of an alloy made with almost 25% tin is very similar to that of modern artefacts made from bell metal which is characterised by a 4:1 ratio of copper and tin and also produces brittle metal artefacts with a silvery surface sheen. However, whilst being brittle, artefacts made from bell metal are renowned for their superior sound quality and although difficult to prove it is possible that the high tin content of Early Iron Age socketed axes of Portland and related types means that they were produced for their sound quality and looks rather than for a use in trade.

8.4. The different roles of socketed axes

If the significance that prehistoric civilisations ascribed to certain types of material culture can be measured in the survival, quantity and quality of certain artefact types (Bradley 2002, 8-9), then the Early Iron Age people of Britain attributed more significance to their socketed axes than to any other item of metalwork in circulation. In Early Iron Age metalwork hoards socketed axes outnumber all other types of metalwork and 39 of the 54 Early Iron Age hoards are made up solely of socketed axes, occasionally in very large numbers. This is true for all regions of Great Britain, even though the number of hoards deposited in Southern England (19) is much greater than the number of hoards deposited in Scotland (3), Northern England (3) and the Midlands (3) (fig. 8.10).
The survival of a large number of complete and almost undamaged Early Iron Age bronze axes suggests that socketed axes were not just commonplace tools that were in use until they reached the end of their life and then discarded, broken up or kept safe for recycling at a later stage (Bradley 2002, 10; Hodder 1982). Many Early Iron Age socketed axes were deposited having come

virtually straight from the mould or, if they had been used, they were often in good condition and deposited with very little damage to their blades and sockets, suggesting careful manufacture, selection and curation prior to deposition.

Amongst the corpus of well over 1400 Early Iron Age axes eleven individual types were identified in this thesis. There are significant differences in the individual axe types' sizes, shapes and weights strongly suggesting different purposes and uses for each individual type (Bradley 2002, 10).

Traditionally, axes are understood as wood-working tools and experimental archaeology and technological analysis of blade wear strongly suggest that this was their predominant purpose during the Late Bronze Age (Roberts and Ottaway 2003; Bamforth 2010). However the derivation from their traditional Late Bronze Age size, weight, decoration, metallurgy and wear suggests alternative uses for Early Iron Age socketed axes. Even though throughout prehistory, Roman, medieval and modern times axes were and are foremost known as a wood-cutting tool, there is also evidence for axes used as weapons, ingots and jewellery with adjustments to their shape, size and weight made accordingly, of course (Schumacher 1989, 247f; Gomez de Soto 2014; 2015; Robinson 1995; Hingley 2009).

It is notable that even when used in a different context their basic, very recognisable socketed-axe-shape was *always* maintained, that is a wedge of different dimensions with a socket and a small side loop for suspension or possible attachment of other items of metalwork.

There is only one Early Iron Age socketed axe of a size small enough to qualify as a pendant (no. 1392: Vale of Wardour hoard, Wiltshire) and the use of Armorican axes as lead ingots in the Early Iron Age has been discussed in great depth (Briard 1965; Bradley 1990, 119; Milcent 2012, 148, Pl.47; Gomez de Soto 2015).

We have no evidence from British Early Iron Age burials for how or where socketed axes may have been worn or carried on the body or how personal the use and ownership of certain socketed axes was. However, looking at contemporary examples from Europe as well as much later medieval imagery might help us understand the use of highly decorated axes as weapons in Early

Iron Age Britain: their use as weapons or votive objects has been strongly suggested based on evidence from Ireland and Central Europe, where axes were found alongside other weapons in male burials (Guštin 1991, 58-59; Schumacher 1989; Todorović 1972, Tafel 18, 6; Cooney 2004, 40). Two early La Tène axes from Horné Orešany (Slovakia) displaying an intricate geometrical and figurative design appear to have been mainly ornamental or votive (Megaw 2012, 447-60; Pieta 2014, 717f, Congail 2015) while there is evidence for axes used in battle in the early medieval ages from the Bayeux Tapestry. The battle axes depicted on the Bayeux Tapestry were mounted on long wooden handles, almost as tall as the warriors carrying them, and the axe heads were, though wedge-shaped, shown to have had very wide, elongated, curved blades as well as a very narrow body, thus showing strong similarities to our Early Iron Age Sompting type axes of Tower Hill and Kingston variants. Battle axes, their making and use in battle as well as accidents were also described in medieval Nordic sagas such as the Fóstbrœðra saga, Chapter 23 and the Harðar saga, Chapter 36 (Kellogg 1997).

While their use as tools, weapons, ingots or items of jewellery is suggested from archaeological and written records, the use of certain types of Early Iron Age socketed axes as instruments or utensils in certain displays and performances may be somewhat more tentative. Socketed axes of Portland, Blandford, East Rudham and Hindon types are small, light-weight, thin-walled types with straight, narrow, unsharpened blades that did not lend themselves to a use in woodwork, battle or as jewellery. These axes were of smaller size, looped and displayed an intentional attractive silver surface strongly suggesting a use in some form of visual display. The metallurgy of one of these four very similar types (Portland type) strongly suggests that this group of axes were cast from an copper alloy made with almost 25% tin which is very similar to that of modern objects made from bell metal. Bell metal is characterised by a 4:1 ratio of copper and tin (that is 78% copper and 22% tin by mass) and produces brittle metal artefacts with a silvery surface sheen, such as bells, cymbals, chimes and other percussion instruments. Ultimately, artefacts made from bell metal are renowned for their superior sonorous qualities and although difficult to prove it is

possible that the high tin content of Early Iron Age socketed axes of Portland and related types indicates that they, too, were produced for their sound quality

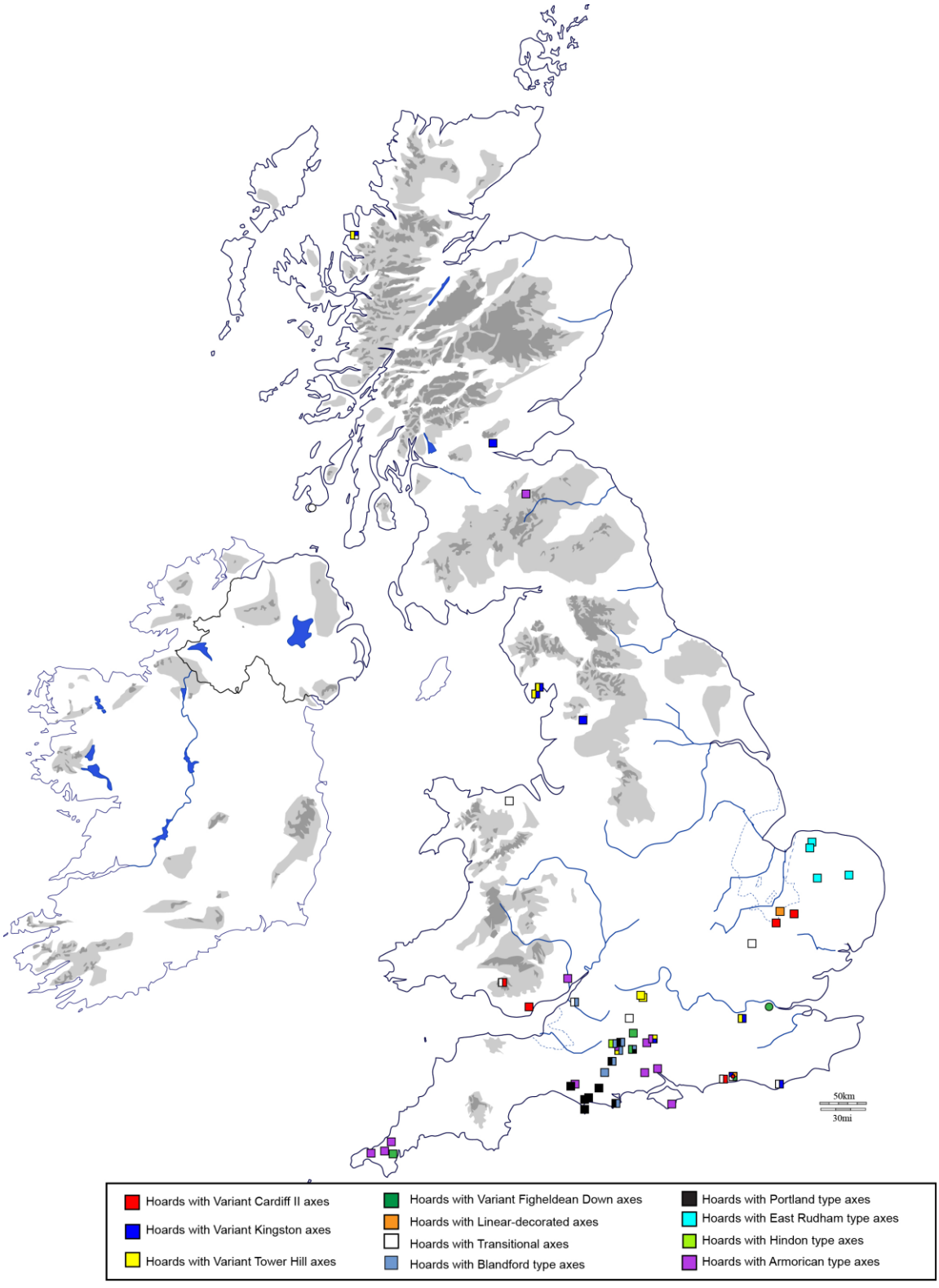


Figure 8.10: Distribution of different axe types within Early Iron Age hoards

and looks rather than for a use in trade, combat or woodwork.

None of these uses are traditionally associated with axes, except perhaps for the use of axes in combat: with their solid bodies, hefty weight and sharp blades they would have made effective weapons. However, how can we understand the transition of socketed axes from being the most common Late Bronze Age wood-working tool to their wider, but much more short-lived range of uses in the Early Iron Age? When the original, traditional ways of how socketed were used changed and the objects' weights, sizes and decoration were adjusted to suit their novel uses, they nevertheless retained the shape of socketed axes. The crucial question is why: why did ingots not adopt a more basic rectangular 'ingot'-shape; why were wood-working tools transformed into weapons of combat and how come utensils in certain displays or performances were shaped like axes? The answer is that the shape was fundamentally important and could not be changed or altered so much that they would not be recognised as socketed axes anymore. The shape was significant; it was vital that it was retained even in their Early Iron Age reincarnations as weapons, ingots, pendants or artefacts for display with certain sonorous properties.

The traditional outline and shape of an object is one of its basic, visual features rather than one of its hidden, implied or underlying characteristics (such as use and meaning) and by the Early Iron Age, the axe-shape or, more correctly, socketed-axe-shape would be understood by the great majority of people living in Britain at the time. They had changed from a traditional 'passive' Late Bronze Age tool into an object that was successfully used in the non-verbal communication between people and wider communities in Britain in the Early Iron Age (Bradley 2002, 10; Hurcombe 2007, 7). Their transition from the basic yet dominant wood cutting tool to a tool that was mainly used for non-verbal communication was a swift and almost explosive one that probably took less than three generations to mature.

The reason and attractiveness for this change of perception of a simple tool may lie mainly in the omnipresence of socketed axes. Amongst all the cutting

and shaping tools of the Late Bronze Age toolkit, socketed axes were the largest and geographically most widely-spread type; they are more numerous than swords, spearheads and daggers and unlike these weapons, they would have probably been part of every household (Schmidt and Burgess 1981; Burgess and Gerloff 1981; Burgess and Colquhoun 1988). There is no region of Late Bronze Age Britain where socketed axes were unknown and their familiar shape would have been easily recognisable by everyone in the British Isles: men and women, old and young.

Figure 8.11: Socketed axe with modern haft attached to it (no. 94 from Ely District, Cambridgeshire)

Unlike with awls and chisels, the wooden handles of socketed axes did not cover half the object and thus left much of their shiny metal surface for the application of moulded decoration, such as ribs and pellets, and the possibility of a subtle or drastic change in surface colour (figs. 8.11+8.12). This non-verbal communication, that is messages moulded into the faces of these very familiar objects, were transferred from one person to another and perhaps helping to distinguish between different people or groups of people or highlighting the significance of different transactions or actions (such as depositional or

seasonal rituals) in different regions. Different types of socketed axes (adorned with different ornaments and made with distinct surface colours) were dominant in different British regions, and even though their traditional 'socketed wedge-shape' still dictated their overall form, new regionally distinctive surface patterns had suddenly appeared implying that new ideas of distinctiveness had crept into the traditional concepts of what a socketed axe was and what it had been traditionally used for.

These differences in size, weight and decoration are not only present amongst all of our contemporary Early Iron Age axes types; they are also evident when comparing Early Iron Age socketed axes to their Late Bronze Age predecessors. Early Iron Age socketed axes were common in some areas that Late Bronze Age socketed axes were not, such as Wessex, Sussex and the Midlands and in these areas they were found associated with items such as other axes, horse gear, cauldrons, sickles and spearheads. Early Iron Age socketed axes displayed different, often very intricate decorations but most importantly of all, they were made, for the first time, from two completely different materials: cast bronze and wrought iron.

Unlike with most Late Bronze Age axes, the copper alloy that was used to make Early Iron Age bronze axes was not the same for all axes: different alloys were employed for different types and different alloys were used to bring out certain surface features that would clearly distinguish an axe of one type from an axe of another. Thus, in the Early Iron Age metallurgy played a significant role not only in how axes were made but also in how to make one type of socketed axe look very different from another type – while still retaining the exact same overall shape.

This change from a metallurgically fairly homogenous group of Late Bronze Age socketed axes to eleven very distinct groups of socketed axes cannot have been fortuitous or coincidental. Material culture does not change by chance: changes were deliberate and stemmed from a deliberate endeavour to emphasise similarities or contrasts with well-known traditions or neighbouring regions (Bradley 2002, 12). According to Bradley material culture is used expressively and changes are created from a clear understanding of what already existed or had existed in the past (Bradley 2002, 12).

Figure 8.12: Socketed axe of Sompting type, Kingston variant from the River Thames (no. 677)

Material culture as a whole has the power to reflect social status and interpret relationships between people and things, with the visual flow of information being much faster (with more information passed on in a shorter time) than words ever could be (Hurcombe 2007). For example, before a stranger utters a word, at a distance, one can see how he is dressed and what armour or jewellery he is wearing – if any (Hurcombe 2007, 7-8), which means that the onlooker can assess the quality and colour of his clothes, the brooch his cloak is pinned with, and the weapons and tools he might have on him and any symbols sewn into his clothes or imprinted on his bag, carved into his shield or moulded into the handles or blades of his weapons or tools. All of this information about another person would be readily available without the exchange of a single word. Subtle differences in the shapes of jewellery, weapons and tools and how or where they are worn may tell the onlooker where he is from or what status he has in his own community (Moore 1992, 215f, 226, 230).

While being very powerful at communicating an individual's contemporary status, his heritage or origin, objects also have the power to communicate information about people of the past, past activities and lifestyles of individuals and their communities even down to their ways of thought (Gosden and

Marshall 1999, 169; Hurcombe 2007, 7; Joy 2009, 541; Gilchrist 2012, 216-218, 244-245).

Throughout British prehistory axes were one of the most familiar objects in daily use: By the Late Bronze Age they had reached without doubt the status of the most essential part of Bronze Age woodmen's and carpenters' kits. As a tool, socketed axes were omnipresent and thus an established part of British Late Bronze Age life – a life that appeared to be foremost practical rather than ritual, with the majority of Late Bronze Age socketed axes showing clear signs of use and resharpening (Bamforth 2010; Roberts and Ottaway 2003).

Hodder and Hutson argue that we have to be aware that even in classifying or identifying an ancient artefact we automatically (and probably unintentionally) affix our modern social connotations to it which can de facto already be seen as an interpretation of the object (see above): "Even to call an object an axe is to assume that people in the past saw it in the same light as we do today – as an object used to cut down trees" (Hodder and Hutson 2003, 27).

This, however, is not what we can derive from our Early Iron Age axes: over three quarters of them could have not have been used for cutting down trees and trimming wood because of their metallurgy and their narrow and blunt blades: can these still be called 'axes' even though they conform only with the former but not with the latter definition?

Artefacts from the modern world and, by way of transfer of thought and interpretation, artefacts from the ancient world, will derive their functional terms and meaning from the way they look and other factors such as their shape, weight and hardness. Hodder and Hutson argue that objects derive their meaning and name from the particular task they were made to perform as well as depending on technological and ecological processes and structures (Hodder and Hutson 2003, 30). Even that, however, is already straying away from simple designation and description, as Shanks and Hodder suggest, when discussing objects and the importance of their contexts (Shanks and Hodder 1997, 14). To illustrate the danger that may lie in a name that already assumes a specific function, they describe two objects of similar shape and size, but completely different interpretation: One 'axe' is made from rock of a certain hardness and bears unambiguous traces of wear and re-sharpening on the

blade while the other ‘axe’ is made of soft chalk and bears no signs of wear and tear on the surface (Shanks and Hodder 1997, 14-15). Are both these artefacts ‘axes’? Or else, is only the one artefact which looks like a modern axe and bears familiar traces of wear on the blade an ‘axe’ while the other is something else entirely even though it looks like an ‘axe’? If we call both of these artefacts ‘axes’ we have deduced a meaning and interpretation of the artefact which may, at least in the case of the second objects, be entirely misleading or in the worst case, plain wrong. Even though it looks like an axe, it may not be an axe at all. Early Iron Age socketed axes of Armorican, Portland, Hindon, East Rudham and Blandford types look like axes, but most of them are small, brittle, show no signs of wear and many could not be hafted because their clay core had never been removed.

It has been suggested that material culture is the manifestation of organised symbolic or ritual practices which were carried out in a meaningful and purposeful manner and that we need to look at the relationship between objects and people rather than just concentrate on the objects themselves (Tilley 1989, 188-89). This means that in different contexts, at different times or in different locations, the same artefact can have a very different meaning and interpretation. A single axe found near a stream or river crossing tells a different story from an axe found in a carefully deposited hoard of metalwork, yet they may have both been used in same the way before their individual deposition. Furthermore, two axes of the same type found in different contexts may have had completely different meanings to the deposition. For example, a Portland type axe from one of the pure axe hoards would have most likely been deposited by a different person and for a different reason to a Portland type axe found in a multi-period deposition in Wiltshire.

If objects that look like axes were not axes, and because of their fragile nature their function could not possibly have been related to wood-working, what should they be classified as? The general term ‘tool’ is useful, because a tool can perform a number of different functions in a number of different social contexts: a coin is a ‘tool’ for exchange just as a brooch is a ‘tool’ for pinning a cloak together. However, both artefacts may also have an additional function in society: possibly a marker of rank and wealth (the brooch) or propaganda and

distribution of ideas and mottos (the coin). Along the same lines, we encounter the same duality in function and meaning (that is materialistic and symbolic) in Early Iron Age socketed axes. Objects can really only be understood in terms of the contexts in which they functioned (Hodder 1982; Bradley 2002, 10). Thus, while one type of axe may have been regarded as common woodworking tool, other types of axes may have been understood as ingots, weapons, or tools for certain displays or performances needed for rituals or festivals, with their unique ornaments communicating their role in both display and society as well as perhaps their users regional identity and status. Associated finds in metalwork hoards from Wiltshire and South Wales suggest that these displays and meetings also included aspects of feasting and cart/horse-riding or –racing.

It seems that variations and changes in material culture were actively applied by their users and that active thought processes were involved when one aspect of an object (e.g. its decoration or shape) was changed while another aspect (e.g. the size or material) remained the same (Bradley 2002, 9-10). Bradley (2002, 11) also argues that it is important to consider the rate of these changes over time: in some societies style changes may have occurred quite often whilst in others, long-standing and well-known ornaments which remained the same or at least remained very similar to the original pattern were preferred.

This brings us back to where we started: Axes had a long tradition amongst the material culture of British prehistory: this was not an artefact that could or would ever be changed. As a woodworking tool, the most ideal shape had been reached in the Stone Age and thereafter only the material that the axes were out of changed. In fact, axes never changed their shape and size thereafter: even modern axes (though with a shaft-hole rather than a socket) still look like prehistoric axes.

What had changed, by the Early Iron Age, however, was their general significance in society. By the Early Iron Age, the axe as a symbol for destruction, change and renewal as well as the underlying continuity of things had reached a zenith. The axe as a symbol had become so significant, potent and well-known in all layers of society that even ingots, weapons and instruments used in performances and display were shaped in their image.

Judging by their great variation in individual size, weight or shape, Early Iron Age socketed axes were not considered a single set of objects but were perceived and functioned in different ways: they had changed into pluralistic objects. For the Early Iron Age people of Britain, socketed axes played different roles in different contexts, and surprisingly, not so much as tools but more as weapons in combat, ingots in trade, showy utensils used in rituals or displays or pendants or ornaments used in certain performances. This much greater variety of functions stands in stark contrast to the role that socketed axes played in the Late Bronze Age which was almost exclusively that of tools for woodwork (Roberts and Ottaway 2003; Gibson, Knight and Murrell 2012, 12-19; Bamforth 2010, 76-77).

8.5. Future work

The dataset presented and discussed in this thesis shows that the regional focus of metalwork creation, display and deposition had changed drastically during the Late Bronze Age to Early Iron Age transition. The outcome of this change was that geographically the focus had changed from East England, the north coast of Kent and the Midlands to Wessex and Cornwall; in terms of sheer numbers, there was now much less metalwork deposited (fig. 8.13).

Nevertheless, the metalwork evidence presented in this thesis complements the Early Iron Age ceramic evidence for the South and East England, with certain regional types of socketed axes found in the same areas as certain ceramic styles, as originally defined by Cunliffe (1974; 2005). Combining Cunliffe's and this present study, they suggest that East Rudham type axes complement the distribution of Cunliffe's West Harling-Fengate style pottery, Portland type axes complement his Kimmeridge-Caburn style pottery and, to some extent, Cunliffe's Later All Cannings Cross type pottery complements the distribution of mixed and multi-period hoards (rather than a single axe type) (fig. 8.14).

These almost identical distribution patterns of Early Iron Age metalwork and pottery, arguably the two largest corpus of evidence, do not only indicate that certain communities in Southern and Eastern England may have shared the same tastes and traditions of decorating metalwork and pottery: these patterns strongly suggest that certain groups of people also shared a common idea of

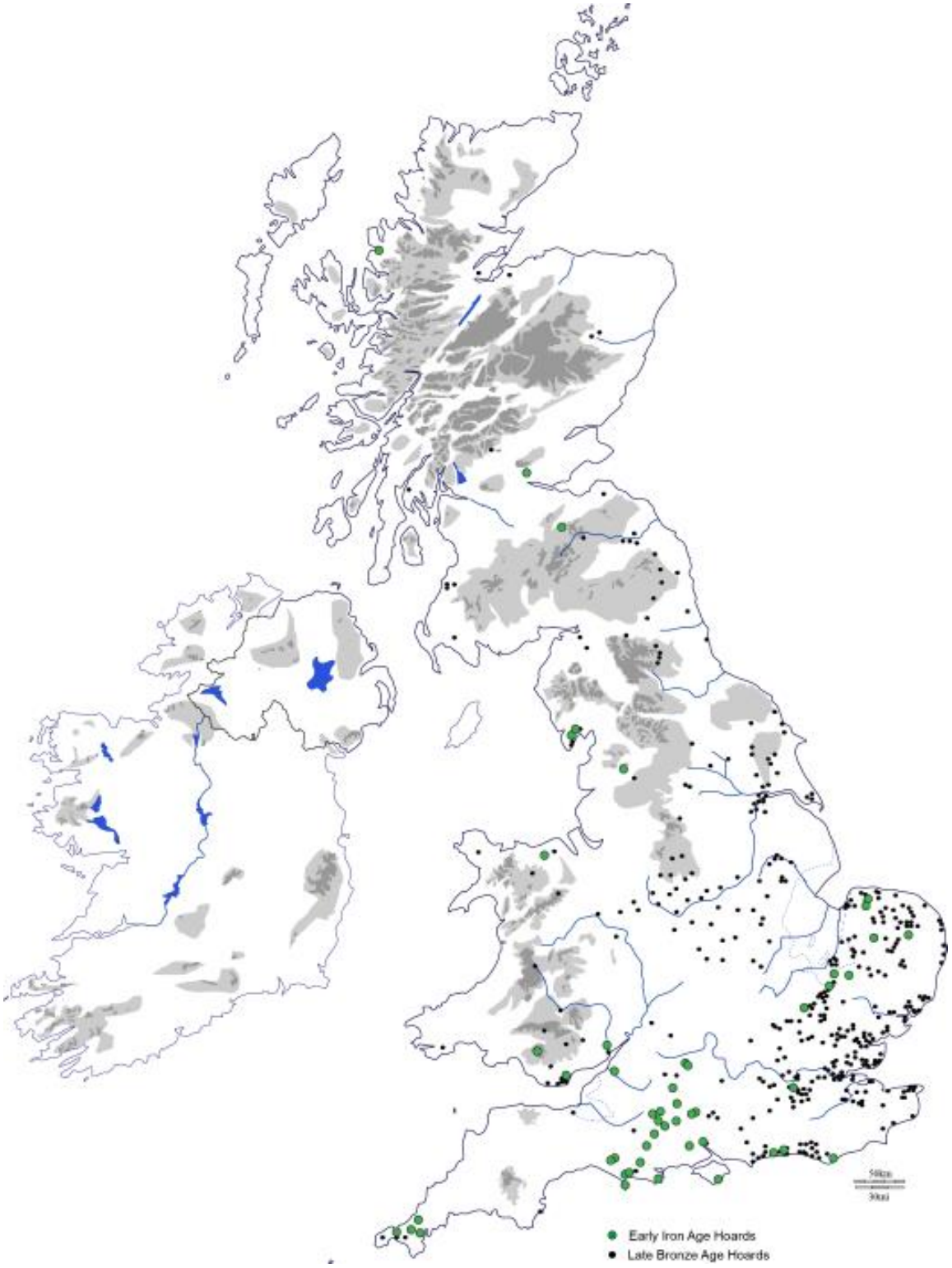


Figure 8.13: Comparison of the numbers and locations of Late Bronze Age and Early Iron Age hoards

deposition practices. Portland type axes were normally deposited with other Portland type axes, but one large group of Portland type from Wiltshire was found associated with artefacts predating them, in the large Salisbury hoard (nos. 1061-1202): not only were these axes found outside of their 'normal' area of distribution, they were also found in a different context and with different material suggesting that they were deposited by different people with a very different idea in mind of how to deposit these axes.

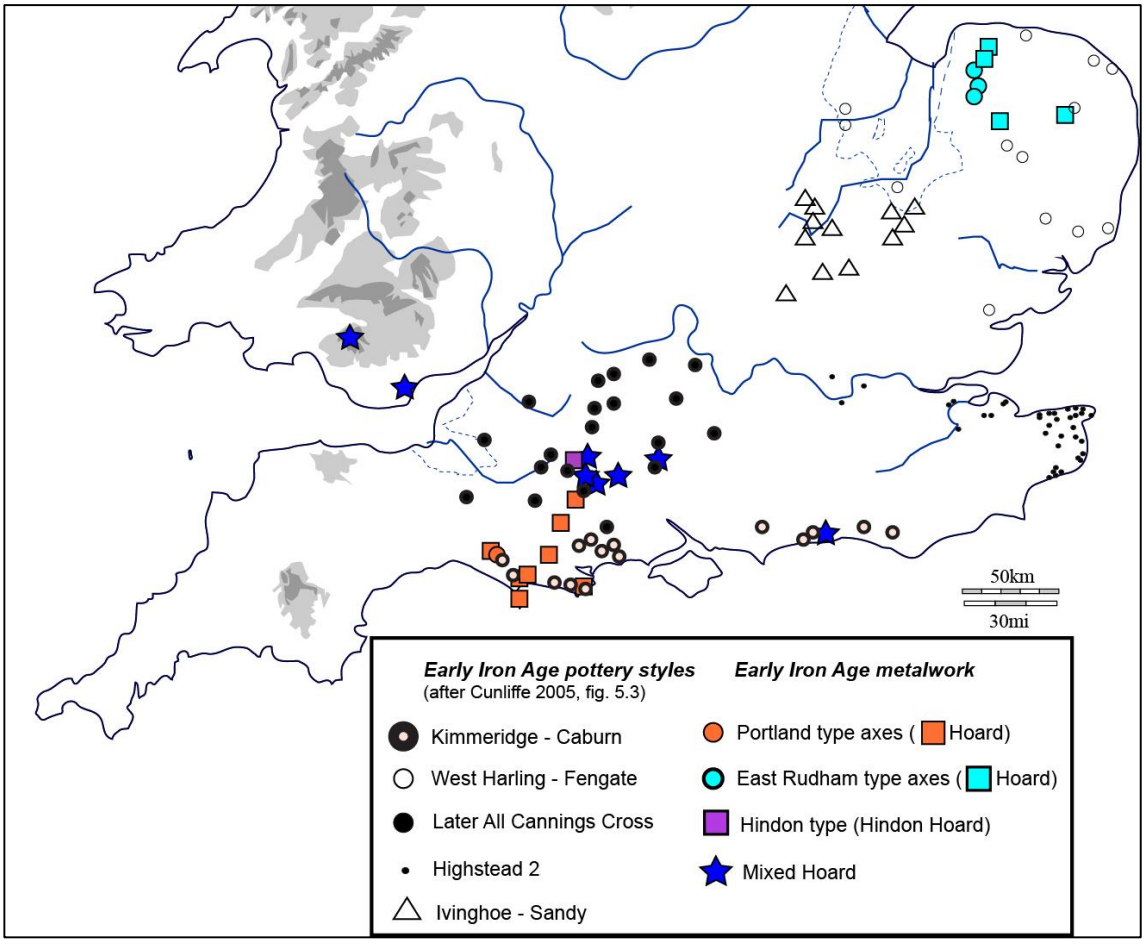


Figure 8.14: Distribution of Cunliffe's Early Iron Age pottery style zones and Early Iron Age hoards containing socketed axes

While communities in Dorset deposited Portland type axes in axe hoards solely composed of socketed axes, the Portland type axes found at Salisbury were not only deposited with items of other types of metalwork: it was items of other types of metalwork predating the group of Portland type axes. This is not unusual for Early Iron Age Wiltshire and a small part of Hampshire: communities here deposited collections of prehistoric and contemporary

metalwork together, such as in the Vale of Wardour and Tisbury hoards (nos. 1388-92 and 1410-1412). These two very different treatments of Portland type axes suggest that the communities – one in Wiltshire and one in Dorset – had two very different ideas of how these axes were to be treated. Even though both communities shared the desecration of metalwork in the group, the contexts were very unique: While one type of deposition was solely focused on Portland type axes, the other celebrated the differences of metalwork (spanning space and time), with Portland type axes seemingly just only 'another addition' to this multi-type group of artefacts.

This research into different deposition practices has the potential to be the basis for future post-doctoral research based on the exploration of the axe in society. The different Early Iron Age socketed axe deposition patterns strongly suggest that socketed axes were pluralistic and multi-functional objects and certain axes were made and shaped in certain ways to be able to fulfil certain functions – as showy objects for display, votive objects, weapons, tools or ingots. This research shows that while regions as far away from one other as Norfolk and Dorset may have had similar ideas of the function and deposition of small, brittle socketed axes, while regions as close to one another as Dorset and Wiltshire, saw their use and function in different lights. This juxtaposition of different communities' contextualisation of socketed axes is also mirrored in the contrast of what has universally been found in association with socketed axes and what has not: While artefacts traditionally considered to be part of the 'male domain' such as artefacts relating to feasting, horse-riding, combat (real or display), harvesting and leatherwork, were often found within mixed hoards, items traditionally considered an integral part of the 'female domain' have not: There are no brooches, pins, bracelets and other ornaments except for some broken-up ornaments in the Tower Hill hoard (Oxfordshire, nos. 932-953) which probably relate to the processes of metalwork recycling rather than decoration and adornment.

Mixed hoards were sometimes found not carefully deposited in a pit: they appear to be 'left-overs' of gatherings or festivities and are strongly reminiscent of prehistoric middens which appear in the same geographical areas (Wiltshire and South Wales; McOmish 1996; Lodwick and Gwilt 2009).

Looking at and comparing the very different contexts of middens, Early Iron Age metalwork assemblages and contemporary settlements it appears that the land (especially in Wessex) was divided into ‘lived-in spaces’ and ‘non-lived-in spaces’. Future research is needed to delve further into these differences and identify what else makes a space permanent (for example a settlement or a cemetery) or temporary (for example a site for feasting or celebration).

Bibliography

Åberg, N. 1931. Bronzezeitliche und Früheisenzeitliche Chronologie, Teil II: Hallstattzeit. Stockholm.

Alcock, L. 1961. 'The Winged Objects in the Llyn Fawr Hoard'. Antiquity XXXV, no. 137, 149-151.

Alcock, L. 1971. 'Excavations at South Cadbury Camp 1970, Summary Report'. Antiquaries Journal LI, 1-7.

Aldsworth, F.G. 1985. 'Proceedings of the Summer Meeting of the Royal Archaeological Institute at Chichester. Archaeology in West Sussex'. Archaeological Journal, 142, 1-6.

Allen, T. 2002. 'Eton College Rowing Course at Dorney Lake'. Current Archaeology XVI, 1 (181), 20-25.

Allen, T. Hey, G. and Miles, D. 1997. 'A line of time: approaches to archaeology in the Upper and Middle Thames Valley, England'. World Archaeology 29 (1), 114-29.

Almagro, M. 1940. 'El hallazgo de la ría de Huelva y el final de la Edad del Bronce en el Occidente de Europa'. Ampurias 2, 85-143.

Almagro, M. 1957-58. 'A propósito de la fecha de las fibulas de Huelva'. Ampurias 19-20, 198-207.

Almagro-Gorbea, M. 1996. 'L'eta del Bronzo in Iberia: Cronologia Relativa'. Acta Archaeologia 67, 153-163.

Almagro-Gorbea, M. et al. (ed.) 1996. Archäologische Forschungen zum Kultgeschehen in der jüngeren Bronzezeit und frühen Eisenzeit Alteuropas. Ergebnisse eines Kolloquiums in Regensburg 4.-7. Oktober 1993, Regensburg.

Alvey, R.C. 1983. 'Three Bronze Axes from Nottinghamshire'. Transactions of the Thoroton Society of Nottinghamshire LXXXVII, 82-83.

Anderson, J. 1886. Scotland in Pagan Times. The Bronze and Stone Ages. Edinburgh.

Annable, F.K. and Simpson, D.D.A. 1964. Guide Catalogue of the Neolithic and Bronze Age collection in Devizes Museum. Devizes.

Annable, R. 1987. The Later Prehistory of Northern England. Cumbria, Northumberland and Durham from the Neolithic to the Late Bronze Age. Oxford: British Archaeological Reports (British Series) 160.

Anon 1899. 'Gifts to Museum and Library'. Journal of the Royal Institution of Cornwall XIII, 152-154.

Anon 1904. 'Archaeological Notes for 1903'. Transations of the Bristol and Gloucestershire Archaeological Society 1904, 327-340.

Anon 1909. 'Bronze Axe-head found as Kirkby-Malzeard'. The Yorkshire Archaeological Journal XX, 254-255.

Anon 1916. 'Additions to the Museum'. Proceedings of the Somerset Archaeological and Natural History Society LXII, lx.

Anon 1919. 'Proceedings'. Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society XIX, 162-168.

Anon 1919-1920. 'Gifts and Additions to the Museum and Art Gallery (1918-1919)'. Journal of the Royal Institution of Cornwall XX, 448f.

Anon 1934. 'Additions to the Museum'. Proceedings of the Dorset Natural History and Archaeological Society LV, lxix.

Anon 1948-49. 'Archaeological Notes – Bronzes and Pottery from Wallingford'. Berkshire Archaeological Journal 51, 65-71.

Anon 1959. 'Socketed Bronze Axe and Roman Altar from Helsby'. Journal of the Chester and North Wales Architectural, Archaeological and Historic Society 46, 79-80.

Anon 1965-66. 'Thames Conservatory Loan Collection'. Berkshire Archaeological Journal 62, 75f.

Anon 1968-1969. 'Salisbury Museum Annual Report (Note on Vase-Headed Pin)'. Salisbury and South Wiltshire Museum Annual Report, 16.

Anon 1969-70. 'Salisbury Museum Annual Report (Notes on socketed axe from Tollard Royal and Ogbourne St Andrews'. Salisbury and South Wiltshire Museum Annual Report, 18.

Anon 1971-1972. 'Salisbury Museum Annual Report (Note on Figheldean Down)'. Salisbury and South Wiltshire Museum Annual Report, 16.

Anon 1973. 'Arch. Notes from Maidstone Museum'. Archaeologia Cantiana XXXVIII, 208ff.

Anon 1973-1974. 'Salisbury Museum Annual Report (Note on the open-work razor from Danebury)'. Salisbury and South Wiltshire Museum Annual Report, 18.

Anon 1978. 'Archaeological Notes – Prehistoric – Ellesborough'. Records of Buckinghamshire XX, 4, 656-665.

Anon 1981. 'Archaeological Notes – Prehistory – Great and Little Kimble.' Records of Buckinghamshire XXIII, 120-126.

Anon 1982. 'Archaeological Notes – Prehistory – Ellesborough'. Records of Buckinghamshire XXIV, 171-176.

Appadurai, A. (ed.) 1986. The Social Life of Things: Commodities in Cultural Perspective. Cambridge: Cambridge University Press.

Applebaum, Shimon 1954. 'The Agriculture of the British Early Iron Age as exemplified at Figheldean Down, Wiltshire'. Proceedings of the Prehistoric Society, New Series 20, 103-114.

ApSimon, A.M. *et al.* 1957-58. 'The Iron Age A Ditch and Pottery at Pagans' Hill, Chew Stoke'. Proceedings of the University of Bristol Spelaeological Society (1957-58), 89-97.

Arbman, H. 1934. 'Zur Kenntnis der älteren Eisenzeit in Schweden'. Acta Archaeologica V, 1-48.

Armstrong, E.C.R. 1922a. 'Some Irish Bronze finds'. Proceedings of the Royal Irish Academy Vol. 36, 134-41.

Armstrong, E.C.R. 1922b. 'Note on the Hallstatt period in Ireland.' Journal of the Royal Society of Antiquaries, Vol. 2, 204-207.

Armstrong, E.C.R. 1924. 'The Early Iron Age or Hallstatt Period in Ireland'. Journal of the Royal Society of Antiquaries, Vol. 54, 1-14, 109-127.

Armit, I. 1991. 'The Atlantic Scottish Iron Age: five levels of chronology'. Proceedings of the Society of Antiquaries of Scotland 121, 181-214.

Ashmore, W. and Knapp, A.B. (eds.) 1999. Archaeologies of Landscape. Oxford.

Ashwin, T. 1996. 'Neolithic and Bronze Age Norfolk'. Proceedings of the Prehistoric Society 62, 41-63.

Atkinson, R.J.C. 1965. 'Wayland's Smithy'. Antiquity XXXIX, 126-133.

Audibert, J. 1963. Inventaria Archaeologia France, Ages des Métaux, tumuli Hallstattiennes du Hérault et du Gard, Fasc. 2, F7-F16. Bonn.

Babb, L. 2001. 'An Early Iron Age dagger from Castlethorpe, Buckinghamshire'. Arch. Journal 158, 325-332.

Balkwill, C.J. 1973. 'The earliest horse-bits of Western Europe'. Proceedings of the Prehistoric Society XXXIX, 425-454.

Bamford, H. and Sheridan, K. 1973-74. 'Two Bronze Implements from Tamworth, Staffs.'. Transactions of the South Staffordshire Archaeological and Historical Society, XV, 1-5.

Bamforth, M. 2010. 'Aspects of Wood, Timber and Woodworking at Flag Fen, 1995-2005'. In: Pryor, F. and Bamforth, M. (eds.) 2010. Flag Fen, Peterborough: Excavation and Research 1995-2007. Oxford: Oxbow, 67-89.

Barber, M. 2001. 'A time and a place for bronze'. In: Brück, J. 2001 (ed.). Bronze Age Landscapes: Tradition and Transformation. Oxford: Oxbow 2001, 161-169.

Barber, M. 2003. Bronze and the Bronze Age: Metalworking and Society in Britain c. 2500-700BC. Stroud: Tempus.

Barber, M. 2005. 'A note on the history of the palstave' In: Bishop, B. and Bagwell, M. 2005. Iwade: occupation of a North Kent village from the Mesolithic to the medieval period. London: Pre-construct Archaeology, Monograph 3, 51-3

Barclay, A. *et al.* 1994. 'An iron socketed axehead from the River Thames, Buscot, Oxfordshire'. Oxoniensa 60, 417-419.

Barrett, J. 1980. 'The pottery of the Later Bronze Age in Southern England'. Proceedings of the Prehistoric Society 45, 297-319.

Barrett, J. and Bradley, R. (eds.) 1980. Settlement and Society in the British Later Bronze Age. Oxford.

Barrett, J.C. 1989a. 'Food, Gender and metal: Questions of Social Reproduction.' In: Stig-Sørensen, M.L. and Thomas, R. (eds.) 1989. The Bronze-Iron Age transition in Europe: aspects of continuity and change in European societies, c. 1200-500BC. Oxford, 304-320.

Barrett, J.C. 1989b. 'Towards an Archaeology of Ritual.' In: Garwood, P., Jennings, D., Skeates, R. and Toms, J. (eds.) 1991. Sacred and Profane: Proceedings of a Conference on Archaeology, Ritual and Religion. Oxford: Oxford University Committee for Archaeology Monograph 32, 1-9.

Barrett, J.C. 1994. Fragments from Antiquity: An Archaeology of Social Life in Britain, 2900-1200BC. Oxford: Blackwell.

Barrett, J.C. 1999. 'The Mythical Landscape of the British Iron Age'. In: Ashmore, W. and Knapp, A.B. (eds.) 1999. Archaeologies of Landscape. Oxford, 253-268.

Barrett, J.C. 2012. 'Are Models of Prestige Goods Economies and Conspicuous Consumption Applicable to the Archaeology of the Bronze to Iron

Transition in Britain?' In: Jones, A.M. *et al* (eds.) 2012. The Prehistoric Society Research Papers No. 5: Image, Memory and Monumentality. Oxford, 6-17.

Barrowclough, D. 2010. Prehistoric Cumbria. Stroud: The History Press.

Basso, K. 1996. 'Wisdom sits in places: notes on a Western Apache landscape'. In: Basso, K. and Feld, S. (eds.) 1996. Senses of Place. Santa Fe (New Mexico), 53-90.

Basso, K. and Feld, S. (eds.) 1996. Senses of Place. Santa Fe (New Mexico).

Baudou, E. 1960. ‚Die regionale und chronologische Einteilung der Jüngeren Bronzezeit im Nordischen Kreis'. Acta Universitatis Stockholmiensis I. Stockholm.

Beeby, B.M. (ed.) 1974. 'Nottinghamshire'. East Midland Archaeological Bulletin 10, 40ff.

Bell, J.A. and Watson, M.D. 1993. 'Two Prehistoric Bronze Weapons from Shropshire'. Shropshire History and Archaeology LXVIII, 103-106.

Bell, M. 1990. Brean Down Excavations 1983-87. Hertford.

Bell, M. 2001. 'Environment in the First Millennium BC'. In: Champion, T.C. and Collis, J. R. (eds.) 2001. The Iron Age in Britain and Ireland: Recent Trends Sheffield: Sheffield Academic Press, 5-16.

Bell, M. and Neumann, H. 1997. 'Prehistoric intertidal archaeology and environments in the Severn Estuary, Wales'. World Archaeological 29 (1), 95-113.

Bennet, M. and Phillips, D. 1997. 'A Late Bronze Age Socketed Axe from Little Bytham, SMR No. 34987.' Lincolnshire History and Archaeology 32, 58.

Benton, S. 1931. 'The excavation of the Sculptor's Cave, Covesea, Morayshire.' Proceedings of the Society of the Antiquaries of Scotland, Vol. 65, 150ff.

Berlin, B. and Kay, P. 1969. Basic Color Terms: Their Universality and Evolution. Berkeley: University of California Press.

Bianco Peroni, V. 1979. 'Bronzene Gewässer- und Höhenfunde aus Italien.' Jahresbericht des Instituts für Vorgeschichte der Universität Frankfurt/Main 1978/1979, 321-35.

Bintliff, J. (ed.) 1984. European Social Evolution: archaeological perspectives. Bradford: University of Bradford.

Bird, J., Chapman, H. and Clark, J. (eds.) 1978. Collectanea Londiniensa. Studies in London Archaeology and History presented to Ralph Merrifield. London and Middlesex Archaeological Society.

Bishop, B. and Bagwell, M. 2005. Iwade: occupation of a North Kent village from the Mesolithic to the medieval period. London: Pre-construct Archaeology, Monograph 3

Blanchet, J.-Cl. 1976. 'L'âge du Bronze en Picardie'. Revue Archéologique l'Oise 7, 29-42.

Blanchet, J-Cl. *et al.* (eds.) 1984a. Les relations entre le continent et les Iles Britanniques à l'Age du Bronze. Actes du Colloque de Lille dans la cadre du 22ème Congrès Préhistorique de France. Amiens.

Blanchet, J.-Cl. 1984b. 'Les premiers métallurgistes en Picardie et dans le Nord de la France. Chalcolithique, Age du Bronze et début du premier Age du Fer'. Mémoires de la Société Préhistorique Française, Vol 17. Amiens.

Blanchet, J.-Cl. *et al.* (eds.) 1987. Les relations entre le Continent et les Iles Britanniques à l'Age du Bronze. Amiens: Revue Archéologique de Picardie Numéro Spécial.

Blundell, J.D. and Longworth, I.H. 1967. 'A Bronze Age Hoard from Portfield Farm, Whalley, Lancashire'. The British Museum Quarterly XXXII, nos. 1-2, 8-14.

Bonnamour, L. (ed.) 2000. Archéologie des fleuves et des rivières. Paris.

Borić, D. 2002. 'Apotropaism and the Temporality of Colours: Colourful Mesolithic-Neolithic Seasons in the Danube Gorges'. In: Jones and MacGregor (eds.) 2002. Colouring the Past. The Significance of Colour in Archaeological Research. Oxford, 23-44.

Boughton, D. 2011. 'Vale of Wardour, Wiltshire'. Treasure Report for 2011T684.

Boughton, D. 2012. 'Hindon, Wiltshire'. Treasure Report for 2012T46.

Bourdieu, P. 1977. Outline of a theory of practice. Cambridge: Cambridge University Press.

Bourgeois, J. *et al.* 1996. 'Belgian Bronze Age Chronology: Results and Perspectives'. Acta Archaeologica 67, 141-152.

Bradford, J.S.P. 1942. 'An Early Iron Age Settlement at Standlake, Oxon.'. Antiquaries Journal, 202-214.

Bradley, R. 1979. 'The interpretation of later Bronze Age metalwork from British rivers'. The International Journal of Nautical Archaeology and Underwater Exploration 8.1, 3-6.

Bradley, R. 1984. The Social Foundation of Prehistoric Britain. Harlow: Longman.

Bradley, R. 1987. 'Stages in the Chronological Development of Hoards and Votive Deposits'. Proceedings of the Prehistoric Society 53, 351-362.

Bradley, R. 1988. 'Status, Wealth and the chronological ordering of cemeteries'. Proceedings of the Prehistoric Society 54, 327-8.

Bradley, R. 1990. The Passage of Arms. Cambridge.

Bradley, R. 1998. The Passage of Arms. Second edition. Oxford.

Bradley, R. 2000. An Archaeology of Natural Places. London: Routledge.

Bradley, R. 2002. The Past in Prehistoric Societies. London and New York: Routledge.

Bradley, R. 2005. Ritual and domestic life in Prehistoric Europe. Abingdon: Routledge.

Bradley, R. 2007. The Prehistory of Britain and Ireland. Cambridge.

Bradley, R. and Gardiner, J. 1984. Neolithic Studies: A review of some recent work. Oxford: British Archaeological Reports (British Series 133).

Bradley, R. and Gordon, K. 1988. 'Human Skulls from the River Thames, their dating and significance'. Antiquity 62, 503-509.

Bradley, R. and Hodder, I. 1979. 'British Prehistory: an integrated view.' Man 14, 93-104.

Bradley, R. and Sheridan, A. 2005. 'Croft Moraig and the chronology of stone circles'. Proceedings of the Prehistoric Society 71, 269-81.

Brailsford, J. 1947. 'A Founder's Hoard from Dartford, Kent, with a Note on Socketed Bronze sword'. Proceedings of the Prehistoric Society (New Series) 13, 175-177.

Brailsford, J. 1948. 'Excavations at Little Woodbury, Wiltshire (1938-39)'. Proceedings of the Prehistoric Society (New Series) XIV, 1-24.

Brailsford, J. 1953. Later Prehistoric Antiquities of the British Isles. British Museum, London.

Braithwaite, M. 1984. 'Ritual and Prestige in the Prehistory of Wessex, c. 2200-1400BC: A new dimension to archaeological evidence.' In: Miller, D. and Tilley, C. (eds.) 1984 Ideology, Power and Prehistory. Cambridge: Cambridge University Press, 93-110.

Brett, M., Collard, M., McSloy, E. 2003. Hartshill Copse, Upper Bucklebury, West Berkshire. Post-excavation assessment and updated project design. PDF at: http://ads.ahds.ac.uk/catalogue/adsdata/arch-911-1/dissemination/pdf/HCB_03_PXA_report_mc_final.pdf

Brewis, W.P. 1922-23. 'The bronze sword in Great Britain'. Archaeologia 73, 253-265.

Brewster, T.C.M. 1963. The excavation of Staple Howe. Malton.

Briard, J. 1959. Travaux du Laboratoire d'Anthropologie et de Préhistoire de la Faculté des Sciences de Rennes, 1958. Rennes.

Briard, J. 1961. Travaux du Laboratoire d'Anthropologie Préhistorique de la faculté des sciences de Rennes, 1961. Rennes.

Briard, J. 1965. Les dépôts Bretons et l'age du Bronze Atlantique. Rennes.

Briard, J. 1987. 'Dépôts de bronze, haches à douille, pré-monnaie et fausse monnaie'. In: Bousquet, J. and Naster, P. (eds.) 1987. Mélanges offerts au docteur J.-B. Colvert de Beaulieu. Paris, 133-143.

Briard, J. *et al.* 1966. Dépôts de l'age Bronze de Bretagne. La Prairie de Mauves à Nantes. Travaux du Laboratoire d'Anthropologie préhistorique. Faculté des Sciences, Rennes.

Briard, J. 1995. 'À l'aurore de l'âge du fer: un phenomene paléomonétaire: les haches à douille Armoricaines'. In: Giot, P.R., Briard, J. and Pape, L (eds.) 1995. Protohistoire de la Bretagne, 177-198.

Briard, J. 2001. 'Armorique, Grande Bretagne et Pays-Bas à l'Age du Bronze' In: Metz, W. H., Beek, B. L. and Steegstra, H. (eds.) 2001. Patina: essays presented to Jay Jordan Butler on the occasion of his 80th birthday, 125-143.

Briard, J., Onnée, Y. and Veillard, J-Y. 1977. L'Age du Bronze au Musée de Bretagne. Rennes.

Bridgford, S. 1997a. 'The first weapons devised only for war'. British Archaeology, March 1997, 10.

Bridgford, S. 1997b. "Mightier than the Pen? An Edgewise Look at Irish Bronze Age Swords'. In Carman, John (ed.): Material Harm: archaeological studies of war and violence, 95-115.

Briggs, C.S. 1987. 'Buckets and cauldrons in the Late Bronze Age of north-west Europe: a review'. In: Blanchet, J.-Cl. *et al.* (eds.) 1987. Les relations entre le Continent et les Iles Britanniques à l'Age du Bronze. Amiens: Revue Archéologique de Picardie Numéro Spécial, 161-187.

Briggs, S. *et al.* 1987. 'The Late Bronze Age Hoard from Brough-on-Humber: A Re-Assessment.' Antiquaries Journal LXVII, 11ff.

Briggs, S. and Williams, G.H. 1995. 'The Later Bronze Age Hoard from Allt Gelli Felen, Myddfai, Carmarthenshire, and other recent finds of South Welsh Axes'. Archaeologia Cambrensis CXLIV, 37ff.

Briscoe, G. 1949. 'Combined Beaker and Iron Age sires at Lakenheath, Suffolk.' Proceedings of the Cambridge Antiquarian Society XLII, 92-116.

British Museum Bronze Age Guide 1920. A guide to the Antiquities of the Bronze Age. London.

British Museum Iron Age Guide 1925. A Guide to the Antiquities of the Early Iron Age in the Department of British and Medieval Antiquities. London.

Britnell, W.J. 1976. 'Antler Cheek Pieces of the British Late Bronze Age'. Antiquaries Journal LVI, 24ff.

Britnell, W.J. 1984. 'Antler Cheek Pieces from Edmundsoles, Haslingfield, Cambridgeshire' Proceedings of the Cambridge Antiquarian Society LXXIII, 5-7.

Britton, D. (ed.) 1960. Inventaria Archaeologia GB, Bronze Age grave groups and hoards in the British Museum, 8th set, GB48-54. London.

Britton, D. 1968. 'The Bronzes [of Ivinghoe Beacon]'. Records of Buckinghamshire XVIII, 3, 204-220.

Britton, D. and Longworth, I.H. (eds.) 1968. Inventaria Archaeologia GB, LBA finds in the Heathery Burn Cave, Co. Durham, 9th set, GB55. London.

Britton, D., O'Connor, B. and Cunliffe, B. 1984. 'The Late Bronze Age hoard'. In: Cunliffe, B. 1984. Danebury: an iron Age hillfort in Hampshire. Volume II The excavations, 1969-78: the finds. Council for British Archaeology, 335ff.

Broadbent, N.D. 1983. 'Too many chiefs and not enough Indians. A Peripheral View of Nordic Bronze Age Society'. In: Rapport från det tredje nordiska symposiet för bronsåldersforskning i Lund. Struktur och Förändring i bronsålderns samhälle., 7-22.

Bromwich, R. 1991 (ed. and tr.). Tri Thlws ar Ddeg Ynys Prydain / Trioedd Ynys Prydein. Cardiff: University of Wales Press (revised edition).

Brooks, C., Daniels, R. and Harding, A. 2002. Past Present and Future. The Archaeology of Northern England. Proceedings of a Conference held in Durham in 1996. Durham: Architectural and Archaeological Society of Durham and Northumberland Research Report 5.

Brown, G., Field, D. and McOmish, D. 1994. 'East Chisenbury Midden Complex'. In: Fitzpatrick, A. and Morris, E. (eds.) 1994. The Iron Age in Wessex: Recent Work Salisbury, 46-9.

Brown, M. 1996. Skelmore Heads, Urswick, Cumbria. RCHMS Archaeological Field Survey Report. Cambridge: RCHME.

Brown, M.A. and Blin-Stoyle, A.E. 1959. 'A Sample Analysis of British Middle and Late Bronze Age Material, using Optical Spectrometry'. P.P.S. New Series 25, 188-209.

Brown, M.A. 1982. 'Swords and Sequence in the British Bronze Age'. Ant. Journal CVII, 1-42.

Brown, N. 1988. 'A Late Bronze Age Enclosure at Lofts Farm, Essex'. P.P.S. 54, 249-302.

Brown, N. 1995. 'A Late Bronze Age hoard from Stumps Cross'. Essex Arch. and Hist. 26, 259-264.

Brown, N. 1998. 'All's well that ends well': a Late Bronze Age hoard from Vange'. Essex Arch. and Hist. 29, 1-18.

Brown, N. 1999. 'A Late Bronze Age hoard from the Blackwater Valley'. Essex Arch. and Hist. 30, 260-262.

Brown, T. 2008. 'The Bronze Age climate and environment of Britain'. Bronze Age Review 1, 7-22.

Brück, J. 1995. 'A place for the dead: the role of human remains on Late Bronze Age Britain'. Proceedings of the Prehistoric Society 61, 245-277.

Brück, J. (ed.) 2001. Bronze Age Landscapes. Traditions and Transformations. Oxford.

Brück, J. 2007. 'Ritual and rationality: some problems on interpretation in European archaeology'. In: Insoll, T. (ed.) 2007. The Archaeology of Identities. Routledge: London and New York, 281-307.

Brun, P. 1988. 'L'entité Rhin-Suisse-France orientale: nature et évolution'. In: Brun, P. and Mordant, C. (eds.) Les Groupe Rhin-Suisse-France orientale et la notion de civilisation des champs d'urnes. Nemours: Mémoires du Musée Préhistorique d'Ile-de-France, 599-620

Brun, P. and Mordant, C. (eds.) 1988. Les Groupe Rhin-Suisse-France orientale et la notion de civilisation des champs d'urnes. Nemours: Mémoires du Musée Préhistorique d'Ile-de-France.

Bruns, D. and Needham, S. 2008. 'Mylor, Cornwall'. Treasure Annual Report 2005/6, 50-52, no. 69.

Von Brunn, W.A. 1968. ‚Mitteldeutsche Hortfunde der jüngeren Bronzezeit'. Römisch-Germanische Forschungen 29. Berlin.

Bryant, S. 1997. "Iron Age" In: Glazebrook, J. (ed.) 1997. Research and Archaeology: a Framework for the Eastern Counties 1. Resource Assessment. Occasional Papers 3, 87ff.

Bryant, S. 2000. "Iron Age" In: Brown, N. and Glazebrook, J. (ed.) 2000. Research and Archaeology: a Framework for the Eastern Counties 2. Research Agenda and Strategy. Occasional Papers 8, 73ff.

Buchli, V.A. 1997. 'Interpreting material culture: the trouble with text'. In: Hodder, I., Shanks, M., Alexandri, A., Buchli, V., Carman, J., Last, J. and Lucas, G. (eds.) 1997. Interpreting archaeology: finding meaning in the past. London and New York: Routledge, 181-193.

Buckland, P.C. *et al.* 2001. 'Is there anybody out there ? A Reconsideration of the environmental evidence from the Breiddin Hillfort, Powys, Wales'. Antiquaries Journal LXXXI, 51ff.

Buckley, D.G. *et al*. 1986. 'Late Bronze Age Hoards from the Chelmer Valley, Essex'. Antiquaries Journal LXVI, 248-266.

Budd, P. and Taylor, T. 1995. 'The faerie smith meets the bronze industry: magic versus science in the interpretation of prehistoric metal-making'. World Archaeology 27, 133-143.

Budgen, W. 1920. 'Bronze Celts found at Eastbourne'. Sussex Archaeoloical Collections 61, 143f.

Budgen, W. 1922. 'Hallstatt Pottery from Eastbourne'. Antiquaries Journal II, 354-360.

Burgess, C. 1962. 'A socketed axe from Central Monmouthshire and its significance for the Bronze Age in Wales and the Marches'. The Monmouthshire Antiquary 1/2, 17-27.

Burgess, C. 1968a. 'The Later Bronze Age in the British Isles and North-Western France'. Archaeological Journal 125, 1-45.

Burgess, C. 1968b. Bronze Age Metalwork in Northern England c. 1000-700BC. Newcastle.

Burgess, C. 1969. 'Chronology and Terminology in the British Bronze Age'. Antiquaries Journal 49, 22-29.

Burgess, C. 1971. 'Some decorated socketed axes in Canon Greenwell's Collection'. The Yorkshire Archaeological Journal 42, 267-272.

Burgess, C. 1974. 'The Bronze Age'. In: Renfrew, C. (ed.) 1974. British Prehistory: A new outline. London, 165-233.

Burgess, C. 1976a. 'Burials with metalwork of the later Bronze Age in Wales and beyond'. In: Boon, G.C. and Lewis, J.M. 1976. Welsh Antiquity. Essays mainly upon prehistoric topics presented to H.N. Savory. Cardiff, 81-104.

Burgess, C. 1976b. 'The Gwithian mould and the forerunners of South Welsh axes'. In Burgess, C. and Miket, R.(eds) Settlement and Economy in the Third and Second Millennia BC. Oxford, 51-79.

Burgess, C., Coombs, D. and Davies, D.G. 1972. 'The Broadward Complex and Barbed Spearheads'. In: Chitty, L.F., Lynch, F. and Burgess, C. (eds.) 1972. Prehistoric man in Wales and the West: essays in honour of L. F. Chitty. Bath, 211-283.

Burgess, C. and Miket, R. 1976. 'Three socketed axes from North-East England with notes on faceted and ribbed socketed axes'. Archaeologia Aeliana IV, 1-9.

Burgess, C. 1979. 'A find from Boyton, Suffolk, and the end of the Bronze Age in Britain and Ireland'. In: Burgess, C. and Coombs 1979 (eds.). Bronze Age Hoards. Some finds Old and New. Oxford, 269-282.

Burgess, C. and Gerloff, S. 1981. The dirks and rapiers of Great Britain and Ireland. Prähistorische Bronzefunde (PBF), Abt. IV, Band 7. München.

Burgess, C. 1985. 'Population, climate and upland settlement.' In: Spratt, D. and Burgess, C. (eds.) 1985. Upland settlement in Britain: the second millennium and after. Oxford: British Archaeological Reports (British Series) 143, 195-229.

Burgess, C. and Coombs 1979 (eds.). Bronze Age Hoards. Some finds Old and New. Oxford.

Burgess, C. and Colquhoun, I. 1988. The Swords of Britain. Prähistorische Bronzefunde, Abteilung IV, 5. Band. München.

Burley, E. 1955-56. 'A Catalogue and Survey of the Metalwork from Traprain Law'. Proceedings of the Society of Antiquaries of Scotland 89, 118-227.

Burnham, H. 1995. A Guide to Ancient and Historic Wales, Clwyd and Powys. London.

Burns, J. and Blitt, M.A. 1969. 'A bronze cauldron of the Iron Age from Elvanfoot, Lanarkshire'. Glasgow Archaeological Journal 1, 29-34.

Butcher, C.H. 1922. 'A Hoard of Bronze discovered at Grays Thurrock'. Antiquaries Journal II, 105-109.

Butcher, C.H. 1923. 'Essex Bronze Implements and Weapons in the Colchester Museum'. Transactions of the Essex Archaeological Society XVI, 258-68.

Butler, J.J. 1963. 'Bronze Age connections across the North Sea, c. 1700-700BC'. Palaeohistoria IX.

Butler, J.J. 1969. ‚Nederland in de Bronstijd'. Fibulareeks 31. Bussum.

Butler, J.J. 1973. 'Einheimische Bronzebeilproduktion im Niederrhein-Maasgebiet'. Palaeohistora 15, 319-343.

Butler, J.J. and Smith, I.F. 1956. 'Razors, urns and the British Middle Bronze Age'. London Institute of Archaeology, 12th Annual Report, 20-52.

Butler, J.J. and Steegstra, H. 2001-2002. 'Bronze Age Metal and Amber in the Netherlands (III:2): Catalogue of the Socketed Axes, part A' Palaeohistoria 43/44, 263-319.

Butler, J.J. and Steegstra, H. 2003-2004. 'Bronze Age Metal and Amber in the Netherlands (III:2): Catalogue of the Socketed Axes, part B' Palaeohistoria 45/46, 197-300.

Callander, G.J. 1922-3. 'Scottish Bronze Age Hoards'. Proceedings of the Society of Antiquaries of Scotland LVII, 123-166.

Callander, G.J. 1936. 'A bronze flesh-hook from Argyll'. Antiquaries Journal XVI, 98.

Calkin, J.M. and Piggott, S. 1939. 'Iron Age 'A' habitation site, Langton Matravers'. Proceedings of the Dorset Natural History and Archaeological Society 60, 66-73.

Cane, L.B. 1939. 'Finds – Socketed Celts'. Proceedings of the Suffolk Institute of Archaeology XXIII, 79-82.

Carman, J. (ed.) 1997. Material Harm: archaeological studies of war and violence. Glasgow.

Carman, J. and Harding, A. 1999. Ancient Warfare. Stroud.

Carpenter, H.C.H. 1929. 'Early Iron Age Craftsmanship'. Antiquaries Journal IX, 376-377.

Carr, G. and Knüsel, C. 1997. 'The ritual framework of excarnation by exposure as the mortuary practice of the early and middle Iron Ages of central Southern Britain'. In: Gwilt, A. and Haselgrove, C. 1997 (eds): Reconstructing Iron Age societies: new approaches to the British Iron Age. Oxford: Oxbow Books, 167-173.

Champion, T. 1975. 'Britain in the European Iron Age'. Archaeologia Atlantica, 1 (2), 127-145.

Champion, T. 1980. 'Pottery in the 1st Millennium BC'. Sussex Archaeological Collections 118, 43-53.

Champion, T. 1989. 'From Bronze to Iron Age in Ireland.' In: Stig-Sørensen, M.L. and Thomas, R. (eds.) 1989. The Bronze-Iron Age transition in Europe: aspects of continuity and change in European societies, c. 1200-500BC. Oxford, 287-303.

Champion, T. and Collis, J. 1996 (eds). The Iron Age in Britain and Ireland: Recent Trends. Sheffield.

Champion, T., Gamble, C., Shennan, S. and Whittle, A. 1984. Prehistoric Europe. London.

Champion, T.C. and Megaw, J.V.S. (eds.) 1985. Settlement and Society: aspects of West European prehistory in the first millennium B.C. Leicester.

Champion, T.C. 1971. 'The end of the Irish Bronze Age'. North Munster Antiquarian Journal 14, 17-24.

Champion, T.C. *et al.* 1981. 'A Late Bronze Age Hoard from Hoaden, Kent'. Archaeologia Cantiana XCVII, 195.

Chapman, J. 2002. 'Colourful Prehistories: The Problem with the Berlin and Kay Colour Paradigm'. In: Jones and MacGregor (eds.) 2002. Colouring the Past. The Significance of Colour in Archaeological Research. Oxford, 45-72.

Cheetham, F.W. (ed) 1977. Bronze Age Metalwork in Norwich Castle Museum. Norwich.

Chesterfield, D.M. 1971. 'A Bronze Axe from Mistely'. Annual Bulletin of the Colchester Archaeological Group 14, 42.

Childe, V.G. 1930. The Bronze Age. Cambridge.

Childe, V.G. 1935. The Prehistory of Scotland. London: Kegan Paul, Trench, Trübner & Co. Ltd.

Childe, V.G. 1936. Man Makes Himself. London: Collins.

Childe, V.G. 1940. Prehistoric Communities in the British Isles. London/Edinburgh.

Childe, V.G. 1945. Scotland before the Scots. London.

Childe, V.G. 1956. Piecing together the Past. London: Routledge and Kegan Paul.

Chitty, L.F. 1928. 'The Willow Moor Bronze Hoard, Little Wenlock, Shropshire'. Antiquaries Journal VIII, 1-30.

Chitty, L.F. 1937. 'How did the hill-fort builders reach the Breiddin?'. Archaeologia Cambrensis XCII, 129-151.

Chitty, L.F. 1939-40. 'Bronze Implements and other Objects from Shropshire in the National Museum of Wales'. Transactions of the Shropshire Archaeological Society L, 143-155.

Chitty, L.F. 1940. 'Bronze Implements from the Oswestry region of Shropshire'. Archaeologia Cambrensis XCV, 27-36.

Chitty, L.F. 1952-54. 'Late Bronze Age spearhead from the Great Doward'. Transactions of the Woolhope Naturalists Field Club XXXIV, 21-23.

Chitty, L.F. and Coombs, D. 1967-8. 'Bronze Hoard and Burial found at Greensborough Farm Shenstone, Staffs., in 1824'. Lichfield and South Staffordshire Archaeological and Historical Society, IX, 1-17.

Chitty, L.F., Lynch, F. and Burgess, C. (eds.) 1972. Prehistoric man in Wales and the West: essays in honour of L. F. Chitty. Bath.

Christie, P.M. 1986. 'Cornwall in the Bronze Age'. Cornish Archaeology 25, 81-111.

Clark, P. (ed) 2009. Bronze Age Connections. Oxford: Oxbow Books.

Clarke, D.V. 1972. 'Projecting ring-headed pins and spiral rings from North Uist'. Scottish Archaeology Forum 4, 118-120.

Clarke, D.V. and Kemp, M. 1984. 'A hoard of late Bronze Age gold objects from Heights of Brae, Ross and Cromarty, Highland Region'. Proceedings of the Society of Antiquaries of Scotland 114, 189-198.

Clarke, J.D.G. and Godwin, H. 1940. 'A Late Bronze Age Find near Stuntney, Isle of Ely'. Antiquaries Journal XX, 52-70.

Clarke, J.D.G. and Fell, C.I. 1953. 'The Early Iron Age Site at Micklemoor Hill, West Harling, Norfolk, and its Pottery'. Proceedings of the Prehistoric Society XIX, 1-39.

Clarke, P.A. 1971. 'The Neolithic, Bronze and Iron Age and Roman-British finds from Mount Batten, Plymouth, 1832-1939'. Devon Archaeological Society 29, 137-162.

Clarke, R.R. 1939. 'The Iron Age in Norfolk and Suffolk'. Archaeological Journal XCVI, 1-114.

Clarke, R.R. and Sainty, J.E. 1946. 'A century of Norfolk Prehistory'. Norfolk Archaeology XXIX, 8-41.

Clarke, R.R. 1947-52. 'Notes on recent archaeological discoveries in Norfolk (1943-48)'. Norfolk Archaeology XXX, 156ff.

Clarke, R.R. 1955-57. 'Archaeological discoveries in Norfolk 1949-55'. Norfolk Archaeology XXXI, 395-416.

Clough, T.H.McK. 1969a. 'Recent Discoveries of Late Bronze Age Metalwork in Norfolk'. Norfolk Archaeology XXXIV, 348-351.

Clough, T.H.McK. 1969b. 'Bronze Age metalwork from Cumbria'. Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society LXIX, 1-40.

Clough, T.H.McK. and Wade-Martins, B.A. 1970. 'A Late Bronze Age hoard from Foxburrow Farm, North Elmham, Norfolk, 1970'. Norfolk Archaeology XXXV, 6-18.

Clough, T.H.McK. 1972a. 'A hoard of Late Bronze Age Metalwork from Aylsham, Norfolk'. Norfolk Archaeology XXXV, 491-493.

Clough, T.H.McK. 1972b. 'A Late Bronze Age Axe from Horsford, Norfolk'. Norfolk Archaeology XXXV, 159-170.

Clough, T.H.McK. 1972c. 'Recent Bronze Age finds from Cumbria'. Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society LXXII, 44-53.

Clough, T.H.McK. and Green, C. 1978. 'The first Late Bronze Age Founder's Hoard from Gorleston, Great Yarmouth, Norfolk'. Norfolk Archaeology XXXVII, 1-18.

Coggins, D. and Tylecote, R.F. 1983. A Hoard of Late Bronze Age Metalwork from Gilmonby, near Bowes, County Durham. The Bowes Museum Archaeological Reports, Barnards Castle, Co. Durham.

Coles, J.M. 1961. 'Scottish Swan's-Neck Sunflower Pins'. Proceedings of the Society of Antiquaries of Scotland 92, 1-9.

Coles, J.M. 1962. 'Scottish Late Bronze Age Metalwork: Typology, Distributions and Chronology'. Proceedings of the Society of Antiquaries of Scotland XCIII, 16-134.

Coles, J.M. *et al.* 1964. 'A Late Bronze Age find from Pyotdykes, Angus, Scotland, with associated Gold, Cloth, Leather and Wood Remains'. Proceedings of the Prehistoric Society (New Series) XXX, 186-198.

Coles, J.M. 1965. 'Bronze Age Metalwork in Dumfries and Galloway'. Transactions of the Dumfries and Galloway Natural History and Archaeological Society XLII (3rd series), 61-98.

Coles, J.M. 1972. 'Later Bronze Age Activity in the Somerset Levels'. Antiquaries Journal LII, 269-79.

Coles, J.M. *et al.* 1979. 'Excavations of Late Bronze Age or Iron Age Date at Washingborough Fen'. Lincolnshire History and Archaeology 14, 5-11.

Coles, J. M. and Harding, A.F. 1979. The Bronze Age in Europe. London.

Collard, M., Darvill, T. and Watts, M. 2006. 'Ironworking in the Bronze Age? Evidence from a 10th century BC settlement at Hartshill Copse, Upper Bucklebury, West Berkshire.' Proceedings of the Prehistoric Society 72, 367-421.

Collingwood, R.G. 1933. 'And Introduction to the Prehistory of Cumberland, Westmorland and Lancashire North of the Sands'. Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society XXXIII, 163.

Collingwood, W.G. 1926. 'An Inventory of the Ancient Monuments of Westmorland and Lancashire North-of-the-Sands'. Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society XXVI, 1-58.

Collis, J. 1977. The Iron Age in Britain. Sheffield.

Collis, J. 1995. 'The first towns'. In: Green, M. 1995. The Celtic World. London, 159-175.

Collis, J. 1996. 'Hill-forts, Enclosures and Boundaries'. In: Champion, T. and Collis, J. 1996 (eds). The Iron Age in Britain and Ireland: Recent Trends. Sheffield, 87-116.

Collyer, H.C. 1908. 'Bronze Implements found Carshalton and Croydon'. Surrey Archaeological Collections XXI, 208-209.

Colquhoun, I. 1977/78. 'Bronze Age Metalwork in Somerset: A Catalogue of Stray Finds'. Somerset Archaeology and Natural History Vol. 122, 83-103.

Congail, Mac 2015. 'God in the axe – Celtic Ceremonial Axes from Horné Orešany (Slovakia)' Journal of Celtic Studies in Eastern Europe and Asia Minor 2015 (February 1st) https://balkancelts.wordpress.com/2015/02/01/god-is-in-the-axe-celtic-ceremonial-axes-from-horne-oresany-slovakia/

Conwell, R.W. 1986-87. 'The Prehistory of Merseyside'. Journal of the Merseyside Archaeological Society 7, 21-61.

Coombs, D. 1965-66. 'Bronze Hoard and burial found at Greensborough Farm, Shenstone, Staffordshire'. Transactions of the Lichfield and South Staffordshire Archaeological and Historical Society VII, 1-16.

Coombs, D. 1971. 'Mam Tor – A Bronze Age Hillfort?'. Current Archaeology 27, 100-102.

Coombs, D. 1979. 'A Late Bronze Age hoard from Cassiobridge Farm, Watford, Hertfordshire'. In: Burgess, C. and Coombs 1979 (eds). Bronze Age Hoards. Some finds Old and New. Oxford, 197-219.

Coombs, D. 1979. 'The Figheldean Down Hoard, Wiltshire'. In: Burgess, C. and Coombs 1979 (eds). Bronze Age Hoards. Some finds Old and New. Oxford, 253-268.

Coombs, D.G. and Thompson, F.H. 1979. 'Excavation of the hill fort of Mam Tor, Derbyshire, 1965-69'. Derbyshire Archaeological Journal XCIX, 7-52.

Coombs, D. *et al.* 2003. 'Tower Hill Axe Hoard'. In: Miles, D. *et al.* 2003. Uffington White Horse and its landscape. Oxford Archaeological Unit, 203-225.

Cooney, G. 2002. 'So Many Shades of Rock: Colour Symbolism and Irish Stone Axes'. In: Jones and MacGregor (eds.) 2002. Colouring the Past. The Significance of Colour in Archaeological Research. Oxford, 93-107.

Cooney, G. 2004. 'Performance and place: The hoarding of axeheads in Irish prehistory' In: Roche, H., Grogan, E., Bradley, J., Coles, J. and Raftery, B. (eds.) 2004. From Megaliths to Metals. Essays in Honour of George Eogan. Oxford: Oxbow, 38-43.

Corcoran, J.X.W.P. 1965. 'A Bronze Bucket in the Hunterian Museum, University of Glasgow'. Antiquaries Journal XLV, 12-17.

Cordier, G. 1996. 'Le dépôt de l'Âge du Bronze Final du Petit-Villate à Neuvy-sur-Barangeon (Cher) et son contexte régional'. Joué-Lès-Tours.

Cotton, M.A. and Frere, S.S. 1968. 'The Excavations [of Ivinghoe Beacon]'. Records of Buckinghamshire XVIII, 3, p. 187-201.

Cotton, J. 1979. 'Three Iron Age Brooches from the Thames foreshore at Mortlake, Syon and Wandsworth'. Transactions of the London and Middlesex Archaeological Society 30, 180-185.

Cottrell, P. 1986. 'An Early Iron Age Pit at Regent's Park, Southampton'. Proceedings of the Hampshire Field Club & Archaeological Society 42, 23-35.

Coursaget, J. and Le Run, J. 1966. 'Gif-sur-Yvette natural radiocarbon measurements, I' Radiocarbon 8, 136.

Coursaget, J., Giot, P.R. and Le Run, J. 1961. 'New Radiocarbon Dates from France'. Antiquity XXXV, no 137, 147-148.

Cowen, J.D. 1933. 'Two bronze swords from Ewart Park, Wooler'. Archaeologia Aeliana 10 (4th series), 185-198.

Cowen, J.D. 1967. 'The Hallstatt Sword of Bronze: on the Continent and in Britain'. Proceedings of the Prehistoric Society XXXIII, 377-453.

Cowen, J.D. 1971. 'A note on the Eastgate Hoard'. Archaeologia Aeliana (4) XLIX, 29-36.

Cowie, T. *et al.* 1996. 'The Late Bronze Age hoard from Corrymuckloch near Amulree, Perthshire: an interim report'. Tayside and Fife Archaeological Journal 2, 60-69.

Cowie, T. *et al.* 1998. 'The St Andrews, Fife, Hoard: Context and Chronology in the Scottish Late Bronze Age'. In: Mordant, C. *et al.* 1998. L'Atelier du bronzier en Europe du XXe au VIII siècle avant notre ère. Actes du colloque international Bronze '96, Neuchâtel et Dijon. III : Production, circulation et consommation du Bronze. Paris, 141-153.

Cowper, H.S. 1905. 'Some Miscellaneous Finds'. Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society V, 182-188.

Cowper, H.S. 1907. 'Bronze Age relics from Furness'. Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society VII, 33-39.

Crawford, O.G.S. and Wheeler, R.E.M. 1921. 'The Llyn Fawr and other Hoards of the Bronze Age'. Archaeologia 71, 133-140.

Crawford, O.G.S. 1922. 'A Prehistoric Invasion of England'. Antiquaries Journal II, 27-36.

Crawford, O.G.S. 1923. 'Air Survey and Archaeology'. Geographical Journal 61 (5), 342-360.

Cree, J.E. 1923-24. 'Account of the excavations on Traprain Law'. Proceedings of the Society of Antiquaries of Scotland 63, 241-286.

Cree, J.E. and Curle, A.O. 1927. 'Account of the exactions on Traprain Law'. Proceedings of the Society of Antiquaries of Scotland 56, 189-261.

Crosse, J. 1807. '…exhibited to the Society a Celt…'. Archaeologia XVI, 362.

Cuddeford, M.J. and Sealey, P.R. 2000. 'A Late Bronze Age hoard from High Easter'. Essex Archaeology and History 31, 1-17.

Cunliffe, B. 1966. 'Stoke Clump, Hollingbury and the Early Pre-Roman Iron Age in Sussex'. Sussex Archaeological Collections CIV, 109-121.

Cunliffe, B. 1968a. 'Early Pre-Roman Iron Age Communities in Eastern England'. Antiquaries Journal XLVIII, 175-191.

Cunliffe, B. 1974. Iron Age Communities in Britain. London/Boston.

Cunliffe, B. 1978. Iron Age Communities in Britain. London/Boston (2nd edition).

Cunliffe, B. 1983. Danebury. Anatomy of an Iron Age Hillfort. London.

Cunliffe, B. 1984. Danebury: an Iron Age hillfort on Hampshire. Volumes 1-2. The excavations, 1969-1978: the finds. Council for British Archaeology (Research Report 52). London.

Cunliffe, B. 1988a. Mount Batten, Plymouth – a Prehistoric and Roman port. Oxford.

Cunliffe, B. 1988b. Greeks, Romans and Barabarians. London.

Cunliffe, B. 1991. Iron Age Communities in Britain. London (3rd edition).

Cunliffe, B. 2004. 'Wessex Cowboys?' Oxford Journal of Archaeology ,Vol. 23, No. 1, 61-81.

Cunliffe, B. 2005. Iron Age Communities in Britain. London (4th edition).

Cunliffe, B. and Miles, D. (eds.) 1984. Aspects of the Iron Age in Central Southern Britain Oxford: Oxford University Committee for Archaeology Monograph 2.

Cunliffe, B. and Phillipson, D.W. 1968. 'Excavations at Eldon's Seat, Encombe, Dorset'. Proceedings of the Prehistoric Society, Vol. 34, 191-238.

Cunliffe, B. and O'Connor, B. 1979. 'The Late Bronze Age Hoard from Danebury, Hants.'. In: Burgess, C. and Coombs 1979 (eds). Bronze Age Hoards. Some finds Old and New. Oxford, 235-244.

Cunnington, M.E. 1922. 'A Village Site of the Hallstatt Period in Wiltshire'. Antiquaries Journal II, 13ff.

Cunnington, M.E. and Cunnington, B.H. 1923. The Early Iron Age inhabited site All Cannings Cross Farm, Wiltshire. Devizes.

Cunnington, M.E. 1934. An introduction to the Archaeology of Wiltshire. Devizes.

Cunnington, M.E. and Goddard, E.H. 1934. Catalogue of Antiquities in the Museum of the Wiltshire Archaeological and Natural History Society at Devizes, part II. Devizes.

Cunnington, M.E. 1938. 'The Walker Bequest'. Wiltshire Archaeological and Natural History Society Magazine 48, 185-190.

Curle, A.O. 1915. 'Account of excavations on Traprain Law'. Proceedings of the Society of Antiquaries of Scotland 49, 139-203.

Curle, A.O. 1920. 'Report of the excavation on Traprain Law.' Proceedings of the Society Antiquaries of Scotland 54, 54-124.

Curle, A.O. and Cree, J.E. 1921. 'Account of the excavation on Traprain Law'. Proceedings of the Society of Antiquaries of Scotland 55, 153-207.

Curwen, E.C. 1937. The Archaeology of Sussex. London.

Curwen, E.C. 1948a. 'Fragments of a Bronze Cauldron, LBA, found at Ditchling'. Sussex Archaeological Collections LXXXVII, xl.

Curwen, E.C. 1948b. 'A Bronze Cauldron from Sompting, Essex'. Antiquaries Journal, Vol. 28, 157-163.

Curwen, E.C. 1954. The Archaeology of Sussex. London (second revised edition).

Dale, W. and Smith, R. 1907. 'Discovery of a bronze bucket of the Early Iron Age at Weybridge in Surrey'. Proceedings of the Society of Antiquaries of Scotland XXI, 464-471.

Darvill, T. 1987. Prehistoric Britain. London: Batsford.

Darvill, T. 2006. 'Beyond Hartshill Copse' In: Collard, M., Darvill, T. and Watts, M. 2006. 'Ironworking in the Bronze Age? Evidence from a 10th century BC settlement at Hartshill Copse, Upper Bucklebury, West Berkshire.' Proceedings of the Prehistoric Society 72, 388-98.

Darvill, T. 2010. Prehistoric Britain. London: Routledge.

Davey, P.J. 1971. 'The distribution of later Bronze Age metalwork from Lincolnshire'. Proceedings of the Prehistoric Society 21, 1, 96-111.

Davey, P.J. 1973. 'Bronze Age Metalwork from Lincolnshire'. Antiquaries Journal. CIV, 51-127.

Davey, P.J. 1976. 'The distribution of Bronze Age metalwork from Lancashire and Cheshire'. Journal of the Chester Archaeological Society 59, 1-14.

Davey, P.J. (ed.) 1999. Recent Archaeological Research on the Isle of Man. Oxford.

Davey, P.J. *et al.*. 1999. 'Bronze Age Metallurgy on the Isle of Man: a symposium'. In: Davey, P.J. (ed.) 1999. Recent Archaeological Research on the Isle of Man. Oxford.

Davey, P.J. and Forster, E. 1975. Bronze Age Metalwork from Lancashire and Cheshire. University of Liverpool (Department of Prehistoric Archaeology, Work Notes I).

Davies, E. 1917. 'An Unnoticed British Camp in Flintshire'. Archaeologia Cambrensis XVII, 433-435.

Davies, J.A. 1996. 'Where Eagles Dare: the Iron Age in Norfolk'. Proceedings of the Prehistoric Society Vol. 62, 63-93.

Davis, R. 1999. 'Bronze Age Metalwork from the Trent Valley, Newark, Notts. to Gainsborough, Lincs.'. Transactions of the Thoroton Society of Nottinghamshire 103, 25-49.

Davis, R. 2006. Basal-looped spearheads, Typology, Chronology, Context and Use. Oxford: British Archaeological Reports (International Series 1497).

Day, P. 1973. 'Hundred of Hoo'. Archaeologia Cantiana LXXXVII, 221.

Déchelette, J. 1913. Manuel d'Archéologie Préhistorique, Celtique et Gallo-Romaine II, 2: Premier Âge du Fer ou Époque de Hallstatt. Paris.

Dehn, W. and Frey, O.-H. 1962. 'Die absolute Chronologie der Hallstatt- und Frühlatènezeit Mitteleuropas auf Grund des Südimports'. Atti des VI Congresso Internazionaledelle Scienze Preistoriche e Protohistoriche, Roma 1962, I. Firenze, 197-208.

De Mortillet, G. 1984. 'Cachettes de l'âge du Bronze en France'. Bulletin de la Société d'Anthropologie de Paris 5, 298-340.

Dent, J.S. 1982. 'Cemeteries and Settlement Patterns of the Iron Age on the Yorkshire Wolds'. Proceedings of the Prehistoric Society Vol. 48, 437-457.

Devenish, D.C. 1964. 'Local Bronze Implements in Kingston-Upon-Thames Museum'. Surrey Archaeological Collections Vol. 61, 1-10.

Dixon, F. 1849. 'On Bronze or Brass Relics, Celts, &c., found in Sussex'. Sussex Archaeological Collections II, 260-270.

Drew, C.D. 1935. 'A Late Bronze Age Hoard from Lulworth, Dorset'. Antiquaries Journal XV, 449-452.

Dunning, G.C. 1934. 'The Swan's Neck and Ring-Headed pins of the Early Iron Age in Britain'. Archaeological Journal 91, 269-295.

Dunning, G.C. 1959. 'The distribution of Socketed Axes of Breton Type'. Ulster Journal of Archaeology, Vol. 22, 53-56.

Duval, P.-M. and Hawkes, C.F.C. (eds.) 1976. Celtic Art in Ancient Europe. London.

Eggert, M.K.H. 1976. Die Urnenfelderkultur in Rheinhessen. Geschichtliche Landeskunde 13. Wiesbaden.

Ehrenberg, M. 1977. Bronze Age Spearheads from Berkshire, Buckinghamshire and Oxfordshire. Oxford: British Archaeological Reports, British Series 34.

Ehrenberg, M. 1980. 'The occurrence of Bronze Age metalwork in the Thames: an investigation'. Transactions of the London and Middlesex Archaeological Society 31, 1-15.

Ehrenreich, R.M. (ed.) 1991. Metals in society: Theory beyond regional analysis. Philadelphia.

Ehrenreich, R.M. 1991: 'Metalworking in Iron Age Britain: hierarchy or heterarchy?' In: Ehrenreich, R.M. (ed.) 1991. Metals in society: Theory beyond regional analysis. Philadelphia, MASCA, 69–80.

Eilsdon, S. 1994. 'Late Bronze or Early Iron Age Pottery from Washingborough Fen'. Lincolnshire History and Archaeology 29, 55-57.

Ellis, P. 1989. 'Norton Fitzwarren Hillfort: A report on the excavations by Nancy and Philip Langmaid between 1968 and 1971.'. Proceedings of the Somerset Archaeological and Natural History Society 133, 1-79.

Ellison, A. 1980. 'The Bronze Age'. Sussex Archaeological Collections 118, 31-43.

Ellison, A. and Drewett, P.A. 1971. 'Pits and pit holes in the British early Iron Age: some alternative explanations.' Proceedings of the Prehistoric Society 37, 183-194.

Ellison, A. and Rahtz, P. 1987. 'Excavations at Hog Cliff Hill, Maiden Newton, Dorset'. Proceedings of the Prehistoric Society 53, 223-269.

Eogan, G. 1964. 'The Later Bronze Age in Ireland in the light of recent research'. Proceedings of the Prehistoric Society XXX, 268-352.

Eogan, G. 1965. Catalogue of Irish bronze swords. Dublin.

Eogan, G. 1969. 'Lock rings of the Late Bronze Age'. Proceedings of the Royal Irish Academy 67C, 93-148.

Eogan, G. 1972. 'Sleeve-fasteners' of the Late Bronze Age'. In: Chitty, L.F., Lynch, F. and Burgess, C. (eds.) 1972. Prehistoric man in Wales and the West: essays in honour of Lily Frances Chitty. Bath, 189-211.

Eogan, G. 1974a. 'Pins of the Irish Late Bronze Age'. Journal of the Royal Society of Antiquaries of Ireland 104, 74-119.

Eogan, G. 1964b. 'Regionale Gruppierungen in der Spätbronzezeit Irlands'. Archäologisches Korrespondenzblatt 4, 319-327.

Eogan, G. 1983. Hoards of the Irish Bronze Age. Dublin.

Eogan, G. 2000. The Socketed Bronze Axes in Ireland. Stuttgart.

zu Erbach, M. *et al.* 1995. Die Urnenfelderzeit nördlich und südlich der Alpen. Ergebnisse eines Kolloquiums. Bonn.

Evans, E. 1933. ,The Bronze Spearhead in Great Britain and Ireland'. Antiquaries Journal LXXXIII, 187-202.

Evans, J. 1881. The Ancient Bronze Implements and Ornaments of Great Britain and Ireland. London.

Fair, M.C. 1946. 'An Interim review of types of Spear-Heads and Axes of Cumberland, Westmoreland and Lancashire North-of-the-Sands'. Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society XLV, 172-179.

Farley, M. 1981. 'Archaeological notes from Buckinghamshire County Museum'. Records of Buckinghamshire XXIII, 120ff.

Farley, M. 1984. 'A Late Bronze Age Razor from Ellesborough, Buckinghamshire'. Antiquaries Journal LXIV, 361-362.

Farrar, R.A.H. 1953. 'Archaeological Fieldwork in Dorset in 1952'. Proceedings of the Dorset Natural History and Archaeological Society 74, 85-111.

Farrar, R.A.H. 1961. 'Recent Discoveries and Accessions for 1960'. Proceedings of the Dorset Natural History and Archaeological Society 82, 83-87.

Fasham, P.J. 1985. The prehistoric settlement at Winnall Down, Winchester. Hampshire Field Club.

Fell, C.I., Lethbridge, T.C. and Bushnell, G.H.S. 1949. 'Archaeological Notes: Bronze Razor from Hills Rd, Cambridge', Proceedings of the Cambridge Antiquarian Society XLII, p. 127.

Fell, C.I. 1951. 'Socketed bronze axe and gouge from Skye'. Antiquaries Journal XXXI, p. 72.

Fell, C.I. and Briscoe, G. 1952. 'An open-work disc from Haslingfield', Proceedings of the Cambridge Antiquarian Society, XLV, 65-66.

Fell, C.I. 1953. 'An Early Iron Age settlement at Linton, Cambridgeshire', Proceedings of the Cambridge Antiquarian Society XLVI, 31-43.

Fitzpatrick, A.P. 1995. 'Appendix: an Early Iron Age (7th century BC) pit with ironworking debris from Cooper's Farm, Dunstan.' In: Barnes, I., Boismier, W.A., Cleal, R.M., Fitzpatrick, A.P. and Roberts, M.R. (eds) 1995. Early settlement in Berkshire: Mesolithic-Roman Occupation in the Thames and Kennet Valleys. Salisbury.

Fletcher, R. 1989. 'The messages of material behaviour: a preliminary discussion of non-verbal meaning'. In: Hodder, I. (ed.) 1989. The Meaning of Things: Material Culture and Symbolic Expression. Abingdon: Routledge, 33-39.

Fontijn, D. 2002. Sacrificial Landscapes: Cultural Biographies of Persons, Objects and Natural Places in the Bronze Age of the Southern Netherlands, c. 2300-600BC. Leiden: Analecta Praehistorica Leidensia, 33/34.

Fontijn, D., van der Vaart, S. And Jansen, R. 2013. Transformation through destruction. A monumental and extraordinary Early Iron Age Hallstatt C barrow from the ritual landscape of Oss-Zevenbergen. Leiden 2013.

Foster, I. and Alcock, L. (eds.) 1963. Culture and Environment. Essays in Honour of Sir Cyril Fox. London.

Foster, J. 1977. Bronze Boar Figurines in Iron Age and Roman Britain. Oxford.

Fox, C. 1922-23. 'A settlement of the Early Iron Age at Abingdon Pigotts, Cambridgeshire, and its subsequent history as evidenced by objects

preserved in the Pigott Collection', Proceedings of the Prehistoric Society (East Anglia) IV, 211-33.

Fox, C. 1923. The archaeology of the Cambridge Region. Cambridge.

Fox, C. 1925. 'A settlement of the Early Iron Age (La Tène 1 Sub-Period) on Merthyr Mawr Warren, Glamorgan'. Archaeologia Cambrensis 7, 44-67.

Fox, C. 1927-28. 'The Early Iron Age in England and Wales'. Proceedings of the Cambridge Antiquarian Society XXX, 52-53.

Fox, C. 1939a. 'The Socketed Bronze sickles of the British Isles'. Proceedings of the Prehistoric Society (New Series) 5, 222-248.

Fox, C. 1939b. 'A Second Cauldron and an Iron Sword from the Llyn Fawr Hoard, Rhigos, Glamorganshire'. Antiquaries Journal XIX, 369ff.

Fox, C. 1941. 'The Non-socketed bronze sickles of Britain'. Archaeologia Cambrensis XCVI, 136.

Fox, C. 1958. 'Pattern and Purpose: A survey of Early Celtic Art in Britain'. Cardiff.

Fox, C. and Hyde, H.A. 1939. 'A Second Cauldron and an Iron Sword from the Llyn Fawr Hoard, Rhigos, Glamorganshire'. Antiquaries Journal XIX, 369-404.

Fox, C. and Wolseley, G.R. 1928. 'The Early Iron Age Sire at Findon Park, Findon, Sussex'. Antiquaries Journal VIII, 449-461.

Francis, A.G. 1933. 'West Alpine and Hallstatt Site at Southchurch'. Transactions of the Essex Archaeological Society XX, 95-107.

Frere, S.S. 1946. 'Bronze Age Objects from Farnham'. Surrey Archaeological Collections Vol. 49, 103-104.

Gantz, Jeffrey 1987 (translation). The Mabinogion. New York: Penguin.

Gardner, E. 1912. 'Some Prehistoric and Saxon Antiquities found in the Neighbourhood of Weybridge'. Surrey Archaeological Collections XXV, 129-136.

Garraway Rice, R. 1924. 'Wandsworth: Discovery of a Late Bronze Age Founder's Hoard'. Surrey Archaeological Collections XXXV, 125-126.

Garrow, D., Bedsmore, E. and Knight, M. 2005. 'Pit Clusters and the Temporality of Occupation: An Earlier Neolithic Site at Kilverstone, Thetford, Norfolk'. Proceedings of the Prehistoric Society 71, 139–57.

Garwood, P., Jennings, D., Skeates, R. and Toms, J. (eds.) 1991. Sacred and Profane: Proceedings of a Conference on Archaeology, Ritual and Religion. Oxford: Oxford University Committee for Archaeology Monograph 32.

Garwood, P. 1991: 'Ritual Tradition and the Reconstruction of Society'. In: Garwood, P., Jennings, D., Skeates, R. and Toms, J. (eds.) 1991. Sacred and Profane: Proceedings of a Conference on Archaeology, Ritual and Religion. Oxford: Oxford University Committee for Archaeology Monograph 32, 10-32.

Gascó, J. *et al.* 1996. 'Chronologie de l'age du Bronze et du premier Age du Fer de la France Continentale'. Acta Archaeologia 67, 227-250.

Gaskell Brown, C. and Hugo, T.E. 1983. 'Prehistoric and Romano-British finds from Mount Batten, Devon 1979-1983'. Devon Archaeological Society 41, 69-75.

Gaucher, G. 1976. 'Les civilisations de l'Age du Bronze dans le Bassin Parisien et le Nord de la France'. In: Guilaine, J. 1976. La préhistoire Française. 2: Les Civilisations Néolithiques et Protohistoires. Paris, 575-584.

Gaucher, G. and Mohen, J.-P. 1972. Typologie des objets de l'Age du Bronze en France. Fascicule I : Épées. Paris.

Gaucher, G. and Mohen, J.-P. 1974. 'L'Age de Bronze dans le nord de la France'. Bulletin de la Société de Préhistoire du Nord (Numéro Spécial). Amiens.

Gaythorpe, H. 1903a. 'The Urswick Bronze Celts'. Transactions of the Cumberland and Westmoreland Antiquarian and Archaeological Society (2nd series) Vol. 3, 310.

Gaythorpe, H. 1903b. 'Recent Archaeological discoveries in Furness'. Barrow Naturalists Field Club Vol. 12, 210ff.

Gell, A. 1998. Art and Agency: an anthropological theory. Oxford.

Gerdsen, H. 1984. 'Ein Westeuropäisches Tüllenbeil in Ingolstadt'. Archäologisches Korrespondenzblatt 14, 53-58.

Gerdsen, H. 1986. Studien zu den Schwertgräbern der älteren Hallstattzeit. Mainz.

Gerloff, S. 1975. The Early Bronze Age daggers in Great Britain. Munich.

Gerloff, S. 1986. 'Bronze Age Class A Cauldrons: Typology, Origins and Chronology'. Journal of the Royal Society of Antiquaries of Ireland 116, 84-116.

Gerloff, S. 2004. 'Hallstatt Fascination: 'Hallstatt' buckets, swords and chapes from Britain and Ireland'. In: Roche, H, Eogan, G., Bradley, J., Coles, J. and Raftery, B. (eds.) 2004. From Megalith to Metals. Essays in honour of G. Eogan. Oxford, 124-154.

Gerloff, S. 2010. 'Atlantic Cauldrons and Buckets of the Late Bronze and Early Iron Ages in Western Europe. With a Review of Comparable Vessels from Central Europe and Italy'. Prähistorische Bronzefunde Band 2,18. Stuttgart.

Gerloff, S., Hansen, S. and Oehler, F. (eds.) 1993. Die Funde der Bronzezeit in Frankreich. Berlin.

Gibson, D., Knight, M. and Murrell, K. 2012. 'Waterworld. Must Farm's Bronze Age Boats.' Current Archaeology Issue 263, 212-219.

Giles, M. 2007a. 'Refiguring right in the Early Iron Age landscapes of East Yorkshire'. In: Haselgrove, C. and Pope, R. 2007 (eds.) 2007. The Earlier Iron Age in Britain and the Near Continent. Oxford, 103-118.

Giles, M. 2007b. 'Good fences make good neighbours? Exploring the ladder enclosures of Late Iron Age East Yorkshire'. In: Haselgrove, C. and Moore, T. 2007 (eds.). The Later Iron Age in Britain and Beyond. Oxford: Oxbow, 235-249.

Giles, M. 2007c. 'Making metal and forging relations: Iron working in the British Isles'. Oxford Journal of Archaeology Vol. 26(4), 395-413.

Giles, M. 2010. A Forged Glamour. Landscape, Identity and Material Culture in the Iron Age. Oxford.

Gingell, C. 1979. 'The Bronze and Iron Hoard from Melksham and another Wiltshire find'. In: Burgess, C. and Coombs 1979 (eds). Bronze Age Hoards. Some finds Old and New. Oxford, 245-251.

Giot, P.R., Briard, J. and Pape, L (eds.) 1995. Protohistoire de la Bretagne. Rennes.

Goddard, E.H. 1917. 'Bronze Implements of the Bronze Age found in Wiltshire, not previously recorded'. Wiltshire Archaeological and Natural History Society Magazine XXVI, 477-485.

Goddard, E.H. 1928. 'Notes on Implements of the Bronze Age found in Wiltshire'. Wiltshire Archaeological and Natural History Society Magazine XXXVI, 92-199.

Goddard, E.H. 1940. 'The Theft of Bronze Implements from Devizes Museum, February, 1934'. Wiltshire Archaeological and Natural History Society Magazine 49, 107-108.

Godelier, M. 1999. The Enigma of the Gift. University of Chicago Press.

Gomez de Soto, J., Bourhis, J.-R., Ghesquière, E., Marcingny, C., Menez, Y., Rivallain, J. and Verron, G. 2006. Pour en finir avec le Bronze Final? Les haches a douilles de type amoricain en France. http://halshs.archives-ouvertes.fr/docs/00/39/52/71/PDF/St-Romain._H._a_d._texte.pdf

Gomez de Soto, J. 2014. 'Hallstatt C elements in the last French hoards of the carp's tongue sword horizon? A critical review.'. Bulletin de la Société Préhistorique Française Tome 111, Volume 4, 727-740.

Gomez de Soto, J. 2015. 'Les haches à douilles de type amoricain: une production strictement de l'âge du Fer. Critique des sources documentaires afférant à leur chronologie'. Bulletin de la Société Préhistorique Française Tome 112, Volume 1 (4), 117-136.

Goody, J. 1977. The domestication of the savage mind. Cambridge: Cambridge University Press.

Gosden, C. 1994. Social Beings and Time. Oxford: Blackwell.

Gosden, C. 2010. 'Extended and Condensed Relations: bringing together landscapes and artefacts'. In: Bintliff, J. (ed.) 1984. European Social Evolution: archaeological perspectives. Bradford: University of Bradford, 127-135.

Gosden, C. and Marshall, Y. 1999. 'The Cultural Biography of Objects'. World Archaeology, Vol. 31, No.2 (Oct. 1999), 169-178.

Gosden, C. and Lock, G. 1999. 'Prehistoric Histories'. World Archaeology, Vol. 30, 2-12.

Graham, A.H., Hinton, D.A. and Peacock, D.P.S. 2002. 'The excavation of an Iron Age and Romano-British settlement in Quarry Field, south of Compact Farm, Worth Matravers, Dorset'. In: Hinton, D.A. (ed.) 2002. Purbeck Papers. Southampton, 1-83.

Gray, H.St.G. 1928. 'Bronze chisel from Ham Hill, Somerset'. Antiquaries Journal VIII, 241-243.

Greatorex, C. (ed.) 1995. An archaeological evaluation at *Shinewater Park*, Eastbourne, East Sussex. Report on Project No. 409. London: UCL (Institute of Archaeology Field Archaeology Unit).

Green, B. 1981. 'Some recent archaeological finds from Norfolk'. Norfolk Archaeology XXXVIII, 88-89.

Green, H.S. 1980. 'Late Bronze Age Wooden Hafts from Llyn Fawr and Penwyllt'. B.B.C.S. XXVIII, 136-142.

Green, H.S. 1985. 'Some Recent Finds of Bronze Age Antiquities from Wales'. Bulletin of the Board of Celtic Studies XXXII, 275-238.

Green, H.S. 1985. 'The Llyn Fawr Hoard: Two New Finds'. Bulletin of the Board of Celtic Studies XXXII, 288-290.

Greenwell, W. and Parker-Brewis, W. 1909. 'The origin, evolution and classification of the bronze spearhead in Great Britain and Ireland'. Archaeologia 58, 444-490.

Gregory, R.A. 2002. 'Prehistoric landscapes in Dumfries and Galloway'. Transactions of the Dumfries and Galloway Natural History and Antiquarian Society LXXVI, 45-79.

Greig, C. 1972. 'Cullykhan'. Current Archaeology 32, 227-231.

Green, H.S. 1981. 'The Dating of Ivinghoe Beacon'. Records of Buckinghamshire XXIII, p. 1ff.

Green, M. 1973. 'A Late Bronze Age Socketed Axe Mould from Worthing'. Sussex Archaeological Collections CXI, 87-93.

Green, M. (ed.) 1995. The Celtic World. London.

Green, M. 1998. 'Vessels of Death: Sacred Cauldrons in Archaeology and Myth'. Antiquaries Journal 78, 63ff.

Greenwell, W. 1906. 'Antiquities of the Bronze Age in the Heathery Burn Cave, County Durham'. Archaeologia LIV, 87-114.

Gregory, C. 1980. 'Gifts to men and gifts to gods: gift exchange and capital accumulation in contemporary Papua.' Man 15, 628-52.

Gregory, C. 1982. Gifts and Commodities. London: Academic Press.

Griffith, W.E. 1957. 'The Pant-y-maen Bronze Hoard'. Bulletin Board of Celtic Studies. XVII, 118-124.

Grimes, W.F. 'Priory Farm Cave, Monkton, Pembrokeshire'. Archaeologia Cambrensis LXXXVIII, 88-153.

Grimes, W.F. 1939. Guide to the Collection illustrating the Prehistory of Wales. Cardiff.

Grimes, W.F. 1946. 'The Prehistoric Period'. In: Nash-Williams, V.E. (ed.). A hundred years of Welsh Archaeology. Gloucester, 24-80

Grimes, W.F. 1993. 'The Excavation of Caesar's Camp, Heathrow, Harmondsworth, Middlesex, 1944'. Proceedings of the Prehistoric Society 59, 303-360.

Grinsell, L.V. 1931. 'Sussex in the Bronze Age'. Sussex Archaeological Collections LXXI, 30-69.

Grinsell, L.V. 1972. 'Archaeological distribution maps'. In: Chitty, L.F., Lynch, F. and Burgess, C. (eds.) 1972. Prehistoric man in Wales and the West: essays in honour of Lily Frances Chitty. Bath, 5-17.

Grinsell, L.V. 1985. 'Bronze Age Artefacts in Avon'. Bristol and Avon Archaeology 4, 2-6.

Grinsell, L.V. 1986. 'Bronze Age Settlement and Burial Ritual'. In: Aston, M. and Iles, R. (eds.) 1986. Archaeology of Avon. A review from the Neolithic to the Medieval Ages. Bristol, 28ff.

Guilaine, J. 1976a. La préhistoire Française. 2: Les Civilisations Néolithiques et Protohistoires. Paris.

Guilaine, J. 1976b. 'Systèmes chronologiques et séquences culturelles des civilisations néolithiques et protohistoriques en France'. In: Guilaine, J. 1976a. La préhistoire Française. 2: Les Civilisations Néolithiques et Protohistoires. Paris, 17-23.

Guilbert, G. 1996. 'The oldest artefact made of lead in the peak: new evidence from Mam Tor.' Mining History: The Bulletin of the Peak District Mines Historical Society Vol. 13/1, 12-18.

Gurney, D. 1990. 'Archaeological finds in Norfolk'. Norfolk Archaeology XLI, 96-106.

Gurney, D. 1998. 'Archaeological finds in Norfolk'. Norfolk Archaeology XLIII, 181-192.

Gurney, D. 1999. 'Archaeological finds in Norfolk'. Norfolk Archaeology XLIII, 358-368.

Guštin, M. 1991. Posočje in der jüngeren Eisenzeit. Ljubljana.

Guttmann, E.B.A. and Last, J. 2000. 'A Late Bronze Age Landscape at South Hornchurch, Essex'. Proceedings of the Prehistoric Soceity 66, 319-359.

Gwilt, A. and Haselgrove, C. 1997. Reconstructing Iron Age societies: new approaches to the British Iron Age. Oxford: Oxbow Books.

Gwilt, A. 2004. 'Tools, Weapons and Late Bronze Age Societies (1150-600BC)'. In: Aldhouse-Green, M. and Howell, R. (eds.) 2004. Gwent County History, Volume 1, 1-16.

Hamilton, J.R.C. 1968. Excavations at Clickhimin, Shetland. Edinburgh.

Handbook 1932. A handbook of the prehistoric archaeology of Britain. Oxford.

Harbison, P. and Laing, R.L. 1974. Some Iron Age Mediterranean Imports in England. Oxford.

Harden, D.B. 1950. 'Italian and Etruscan finds in Britain'. Atti della congresso internazionale de preistoria e protohistoria mediterranea. Rome.

Harding, A.F. and Young, R. 1986. 'Pictures of an Exhibition: New Discoveries concerning the Heathery Burn Hoard'. Durham Archaeological Journal 2, 1-7.

Harding, A.F. 1999. Experiment and Design. Archaeological Studies in Honour of John Coles. Oxford.

Harding, D.W. 1974. The Iron Age in Lowland Britain. London.

Harding, D.W. (ed.) 1976. Hillforts. London/New York/San Francisco.

Härke, H. 1989. 'Transformation or collapse? Bronze Age to Iron Age settlement in West Central Europe'. In: Stig-Sørensen, M.L. and Thomas, R. (eds.) 1989. The Bronze-Iron Age transition in Europe: aspects of continuity and change in European societies, c. 1200-500BC. Oxford, 184-203.

Harrison, E.E. 1986. 'Iron Age Material from Queen Mary Hospital, Carshalton, and its Implications for the Chronology of the Earliest Iron Age in the Lower Thames Region'. Surrey Archaeological Collections 65, 133-138.

Harrison, R.J. and Craddock, P. 1979. 'The rediscovered of the lost hoard of Late Bronze Age axes from Roxby, Lincs.'. Antiquaries Journal LIX, 231ff.

Hartley, B.R. 1957. 'The Wandlebury Iron Age hill-fort, excavations of 1955-56', Proceedings of the Cambridge Antiquarian Society L, 1-27.

Haselgrove *et al* 1997. 'Understanding the British Iron Age: An agenda for action. A Report of the Iron Age Research Seminar and the Council of the Prehistoric Society'. In: Gwilt, A. and Haselgrove, C. 1997. Reconstruction Iron Age Societies. Oxford (Oxbow Monograph 71).

Haselgrove, C. 2002. 'The Later Bronze Age and the Iron Age in the Lowlands'. In: Brooks, Daniels and Harding 2002 (eds): Past Present and Future. The Archaeology of Northern England. Proceedings of a Conference held in Durham in 1996. Durham: Architectural and Archaeological Society of Durham and Northumberland Research Report 5, 49-71.

Haselgrove, C. and Moore, T. 2007 (eds.). The Later Iron Age in Britain and Beyond. Oxford: Oxbow, 235-249.

Haselgrove, C. and Pope, R. 2007 (eds.). The earlier Iron Age in Britain and the Near Continent. Oxford.

Hastings, F.A. 1965. 'Excavations of an Iron Age Farmstead at Hawk's Hill, Leatherhead'. Surrey Archaeological Collections 62, 1-42.

Hastings Russell, M.P. 1870. 'Antiquities and Work of Art Exhibits (Note on Find of Bronze Implements)'. Archaeological Journal XXVII, 68.

Hatt, J.J. 1955. 'Chronique de protohistoire'. Bulletin Société Prèhistorique Française 52, 96-101.

Hatt, J.J. 1961. 'Chronique de protohistoire'. Bulletin Société Prèhistorique Française 58, 184-195.

Hatt, J.J. 1962. 'Chronique de protohistoire'. Bulletin Société Prèhistorique Française 59, 654-667.

Hawkes, C.F.C. 1931a. 'Hill-forts'. Antiquity 5, 60-97.

Hawkes, C.F.C. 1931b. 'Die Erforschung der Spätbronzezeit, Hallstatt- und La Tène Zeit in England und Wales von 1914-31'. Berichte der Römisch-Germanischen Kommission XXI, 86ff.

Hawkes, C.F.C. 1938. 'A Hallstatt bronze sword from the Thames at Taplow'. Antiquaries Journal XVIII, 185-187.

Hawkes, C.F.C. 1940. 'A Sire of the Late Bronze-Early Iron Age transition at Totternhoe, Bedfordshire' Antiquaries Journal XX, 487-491.

Hawkes, C.F.C. 1943. 'The Early Iron Age Settlement at Fengate, Peterborough'. Archaeological Journal C, 188-224.

Hawkes, C.F.C. 1946. 'Prehistoric Lincolnshire'. Archaeological Journal CIII, 4-15

Hawkes, C.F.C. 1959. 'The A B C of the British Iron Age'. Antiquitiy XXXIII, 170-188.

Hawkes, C.F.C. 1960. 'A scheme for the British Bronze Age'. Duplicated précis of an address presented to the C.B.A. Bronze Age Conference, London, December 1960.

Hawkes, C.F.C. 1976a. 'St Catherine's Hill, Winchester: the report of 1930 re-assessed'. In: Harding, D.W. (ed.) 1976. Hillforts. London/New York/San Francisco, 59-74.

Hawkes, C.F.C. 1976b. 'Celts and Cultures: Wealth, Power and Art'. In: Duval, P.-M. and Hawkes, C.F.C. (eds.) 1976. Celtic Art in Ancient Europe. London, 1-27.

Hawkes, C.F.C., Myres, J.N.L. and Stevens, C.G. 1930. 'St Catherine's Hill, Winchester'. Proceedings of the Hampshire Field Club and Archaeological Society 11, 5ff

Hawkes, C.F.C. and Smith, M. (eds.) 1955. Inventaria Archaeologia GB, Bronze Age hoards in the BM, 2nd set, GB9-13. London.

Hawkes, C.F.C. and Smith, M. (eds.) 1956. Inventaria Archaeologia GB, Grave groups and hoards of the British Bronze Age, 3rd set, GB14-18. London.

Hawkes, C.F.C. and Smith, M.A. 1957. 'On some buckets and cauldrons of the Bronze and Early Iron Ages'. Antiquaries Journal XXXVII, 131-198.

Hawkes, C.F.C. 1960. A scheme for the British Bronze Age. Unpublished Lecture.

Hawkes, C.F.C. and Clarke, R.R. 1963. 'Gahlsdorf and Caister-on-Sea'. In: Foster, I. and Alcock, L. (eds.) 1963. Culture and Environment. Essays in Honour of Sir Cyril Fox. London, 193-240.

Hawkes, C.F.C. and Hull, M.R. 1987. Corpus of Ancient Brooches in Britain. Pre-Roman Bow Brooches. Oxford.

Hawkes, S.C. 1969. 'Finds form two Middle Bronze Age pits at Winnall, Winchester, Hampshire. Proceedings of the Hampshire Field Club and Archaeological Society XXVI, 5-17.

Hayman, G., Jones, P., and Poulton, R. 2009. Settlement sites and sacred offerings. Prehistoric and later archaeology in the Thames valley near Chertsey. Surrey County Archaeology Unit. Woking.

van Heeringen, R.M. 1988. 'Iron Age occupation of the dunes near Haamstede on the island of Schouwen-Duiveland, Province of Zeeland, The Netherlands'. Helinium XXVII, 63-80.

Heal, S.V.E. 1979. 'A Late Bronze Age socketed axe with part of its wooden haft, from Fen Drayton, Cambridgeshire', Proceedings of the Cambridge Antiquarian Society LXIX, 37-41.

Hearne, F. 1940. 'A Bronze Hoard from Flansham, near Middleton'. Sussex Archaeological Collections LXXXI, 205-210.

Hein, M. 1989. 'Ein Scheidenbeschlag vom Heiligenberg bei Heidelberg. Zur Typologie endbronzezeitlicher und ältereisenzeitlicher Ortbänder (Ha B 2/3 – Ha C)' Jahrbuch des Römisch-Germanischen Zentralmuseums 36 (1), 301-326.

Helms, M. 2009. 'The mastery of hard materials. Thoughts on technology, materiality and ideology occasioned by the Dover boat.' In: Clark, P. (ed.) 2009. Bronze Age Connections. Oxford: Oxbow Books, 149-158.

Hemp, W.J. 1931. 'The Clynnog Collar and the Carnguwch Cairn'. Archaeologia Cambrensis LXXXVI, 354-355.

Hencken, H. O'Neill 1932. The Archaeology of Cornwall and Scilly. London.

Hencken, H. O'Neill 1956. 'Carp's Tongue swords in Spain, France and Italy'. Zephyrus 7, 125-178.

Hencken, H. O'Neill 1971. 'The earliest European helmets'. American School of Prehistoric Research Bulletin 28. Cambridge, Massachssetts.

Hennig, H. 1998. ‚Une datation dendrochronologique pour le tumulus 8 de Wehringen.' In: Mordant, C., Pernot, M and Rychner, V. (eds.) 1998. L'Atelier du bronzier en Europe du XXe au VIII siècle avant notre ère. Paris: CTHS (Documents préhistoriques 10), 161–162.

Hennig, H. 2001. ‚Gräber der Hallstattzeit in Bayerisch-Schwaben'. Monographien der Archaeologischen Staatssammlung München 2. Stuttgart.

Herbert, E. 1993. Iron, Gender and Power. Rituals of Transformation in African Societies. Bloomington and Indianapolis.

Hewison, R. 1987. The Heritage Industry. London: Methuen.

Hildebrand, H. 1872. Studier i jämförande fornforskning.- Bidrag till spännets historia. S.A. Tidskr. f. Sverige. Fjerde Delen. Stockholm.

Hill, J.D. and Cumberpatch, C.G. (eds.) 1995. Different Iron Ages. Studies on the Iron Age in Temperate Europe. Oxford.

Hill, J.D. 1995a. 'How Should We Understand Iron Age Societies and Hillforts ? A Contextual Study from Southern Britain'. In: Hill, J.D. and

Cumberpatch, C.G. (eds.) 1995. Different Iron Ages. Studies on the Iron Age in Temperate Europe. Oxford, 45-66.

Hill, J.D. 1995b. 'The Pre-Roman Iron Age in Britain and Ireland (ca. 800BC to AD100): An Overview'. Journal of World Prehistory 9 (1), 47-98.

Hill, J.D. 1995c. Ritual and Rubbish in the Iron Age of Wessex. Oxford: British Archaeological Reports (British Series 242).

Hingley, R. 1992. 'Society in Scotland from 700 BC to AD 200'. Proceedings of the Society of Antiquaries of Scotland 122, 7-52.

Hingley, R. 1995. 'The Iron Age in Atlantic Scotland: Searching For the meaning of the substantial house'. In: Hill, J.D. and Cumberpatch, C.G. (eds.) 1995. Different Iron Ages. Studies on the Iron Age in Temperate Europe. Oxford, 185-194.

Hingley, R. 1996a. 'Prehistoric Warwickshire: a review of the evidence'. Transactions of the Birmingham and Warwickshire Archaeological Society 100, 1-25.

Hingley, R. 1996b. 'Ancestors and identity in the later prehistory of Atlantic Scotland: the reuse and reinvention of Neolithic monuments and material culture'. World Archaeology Vol. 28, 231-243.

Hingley, R. 1997. 'Iron, iron working and regeneration: a study of the symbolic meaning of metalworking in Iron Age Britain'. In: Gwilt, A. and Haselgrove, C. 1997 (eds): Reconstructing Iron Age societies: new approaches to the British Iron Age. Oxford: Oxbow Books, 9-18.

Hingley, R. 2006. 'The deposition of iron objects in Britain during the later prehistoric and Roman periods: contextual analysis and the significance of iron' Britannia 37, 213-57.

Hingley, R. 2009. 'Esoteric Knowledge? Ancient Bronze Artefacts from Iron Age Contexts." Proceedings of the Prehistoric Society 75, 143-165.

Hixon, J. 1832. 'Account of some ancient Instruments found in quarrying Stone on the South Side of Roseberry Topping in 1826'. Archaeologia Aeliana II, 213.

Hodder, I. 1979. 'Social and economic stress and material culture patterning'. American Antiquity 44, 446-454.

Hodder, I. 1982. Symbols in Action: ethno-archaeological studies of material culture. Cambridge: Cambridge University Press.

Hodder, I. (ed.) 1989. The Meaning of Things: Material Culture and Symbolic Expression. Abingdon: Routledge.

Hodder, I. 1989. 'Post-modernism, post-structuralism and post-processual archaeology'. In: Hodder, I. (ed.) 1989. The Meaning of Things: Material Culture and Symbolic Expression. Abingdon: Routledge, 66-78.

Hodder, I 1995. Theory and Practice in Archaeology. London: Routledge.

Hodder, I. (ed.) 1982. Symbolic and Structural Archaeology. Cambridge: Cambridge University Press.

Hodder, I., Shanks, M., Alexandri, A., Buchli, V., Carman, J., Last, J. and Lucas, G. (eds.) 1997. Interpreting archaeology: finding meaning in the past. London and New York: Routledge.

Hodder, I. and Hutson, S. 2003. Reading the Past: Current Approaches to Interpretation in Archaeology. Cambridge: Cambridge University Press.

Hodges, H.W.M. 1960a. 'The Bronze Age moulds of the British Isles – Part 1: Scotland and Northern England-Moulds of stone and bronze'. Sibrium V, 129-152.

Hodges, H.W.M. 1960b. 'The Bronze Age moulds of the British Isles – Part 2: England and Wales-Moulds of stone and bronze'. Sibrium V, 153-163.

Hodson, F.R. 1960. 'Reflections on 'The ABC of the British Iron Age''. Antiquity 34, 138-140.

Hodson, F.R. 1964. 'Cultural grouping within the British pre-Roman Iron Age'. Proceedings of the Prehistoric Society XXX, 99-110.

Hodson, F.R. 1971. 'Three Iron Age Brooches from Hammersmith'. In: Sieveking, G. de G. (ed.)1971. Prehistoric and Roman Studies. London.

Hogg, A.H.A. 1972a. 'The Size-Distribution of Hill-Forts in Wales and the Marches'. In: Chitty, L.F., Lynch, F. and Burgess, C. (eds.) 1972. Prehistoric man in Wales and the West: essays in honour of Lily Frances Chitty. Bath, 293-319.

Hogg, A.H.A. 1972b. 'Hill-forts in the coastal area of Wales'. In: Thomas, C. 1972. The Iron Age in the Irish Sea Province. Papers given at a CBA conference held at Cardiff, January, 3th to 5th, 1969. London, 11-24.

Holleyman, G.A. and Curwen, E.C. 1935. 'Late Bronze Age Lynchet Settlements on Plumpton Plain'. Proceedings of the Prehistoric Society (New Series) 1, 16-39.

'Horsehope Hoard' 1888. 'Reports on Local Museums in Scotland - Peebles'. Proceedings of the Society of Antiquaries of Scotland II, 333-337.

Howarth, E. 1899. Catalogue of the Bateman Collection of Antiquities in the Sheffield Public Museum. London.

Hubert, H. and Mauss, M. 1964. Sacrifice: Its Nature and Functions. Chicago: University of Chicago Press.

Hughes, G. 1994. 'Old Oswestry Hillfort: Excavations by W.J. Varley, 1939-40'. Archaeologia Cambrensis CXLIII, 46-91.

Hundt, H.J. 1955. 'Versuch zur Deutung der Depotfunde der nordischen jüngeren Bronzezeit unter besonderer Berücksichtigung Mecklenburgs'. Jahrbuch des Römisch-Germanischen Zentralmuseums Mainz 2, 96-140.

Hunter, F. 1997. 'Iron Age hoarding in Scotland and northern England'. In: Gwilt, A. and Haselgrove, C. 1997 (eds): Reconstructing Iron Age societies: new approaches to the British Iron Age. Oxford: Oxbow Books, 109-133.

Hurcombe, L.M. 2007. Archaeological Artefacts as Material Culture. London: Routledge.

Huth, C. 1997. Westeuropäische Horte der Spätbronzezeit. Regensburg.

Huth, C. 2000. 'Metal circulation, communication and traditions of craftsmanship in Late Bronze Age and Early Iron Age Europe'. In: Pare, C. (ed.) 2000. Metal makes the World go round. Oxford, 176-193.

Hüttell, H.G. 1981. Bronzezeitliche Trensen in Mittel- und Osteuropa. Prähistorische Bronzefunde XVII, 1. München.

Hutton, P. 1993. History as an art of memory. Hanover, NE: University Press of New England.

Iago, W. 1899-1900. 'The Harlyn Explorations'. Journal of the Royal Institution of Cornwall XIV, 325-333.

Iles, R and Kidd, A. 1987. 'Avon Archaeology 1986 and 1987'. Bristol and Avon Archaeology 6, 44-57.

van Impe, L and Thyssen, W. 1979. 'Wapengraf uit de vroege Ijzertijd te Rekem'. Archaeologia Belgica 213, 63ff.

van Impe, L. 1989. 'Découvertes récentes de tombes "aristocratiques" de la transition Hallstatt/La Téne dans le nord-est de la Belgique'. In: 2 Otte, M. and Ulrix-Closset, M. 1989. Le civilisation Hallstatt. Rencontre Internationale. Liège, 275-289.

Ingold, T. 2007: 'Materials against materiality'. Archaeological Dialogues 14 (1), 1-16.

Insoll, T. (ed.) 2007. The Archaeology of identities: a reader. Routledge: London and New York.

Insoll, T. 2007. 'Introduction: configuring identities in archaeology'. In: Insoll, T. (ed.) The Archaeology of Identities: a reader, 1-18.

Jackson, D.A. 1973. 'Excavations at North Lodge, Ecton, Northamptonshire 1969'. Northamptonshire Archaeology 8, 31-38.

Jackson, J.W. 1927. 'Notes – Bronze Age find in Cheshire', Antiquaries Journal VIII, 62-64.

Jackson, M. 1996. 'Introduction'. In: Jackson 1996 (ed). Things as They Are: New Directions in Phenomenological Anthropology. Indiana University Press, 1-51.

Jackson, M. 1996 (ed). Things as They Are: New Directions in Phenomenological Anthropology. Indiana University Press.

Jacob, C. 1995. Metallgefäße der Bronze- und Hallstattzeit in Nordwest-, West- und Süddeutschland. Stuttgart (PBF II, 9).

Jacob-Friesen, G. 1967. Bronzezeitliche Lanzenspitzen Norddeutschlands und Skandinaviens. Veröffentlichungen der urgeschichtlichen Sammlungen des Landesmuseums zu Hannover 17. Hildenheim.

Jacob-Friesen, G. 1968. ‚Ein Depotfund des Formenkreises um die ‚Karpfenzungenschwerter' aus der Normandie'. Germania 46, 248-274.

Jacob-Friesen, G. 1974. Einführung in Niedersachsens Urgeschichte, III. Teil. Hildesheim.

James, S. 1993. Exploring the World of the Celts. London.

Jessup, R.F. 1933. 'Bronze Age Antiquities from the Lower Medway'. Archaeologia Cantiana XLV, 179-188.

Jockenhövel, A. 1971. Die Rasiermesser in Mitteleuropa. München.

Jockenhövel, A. 1972. 'Westeuropäische Bronzen aus der späten Urnenfelderzeit in Südwestdeutschland'. Archäologisches Korrespondenzblatt 2, 103-109.

Jockenhövel, A. 1980a. ‚Tüllenmesser fron den Britischen Inseln'. Archäologisches Korrenspondenzblatt 10, 233-237.

Jockenhövel, A. 1980b. Die Rasiermesser in Westeuropa. München.

Joffroy, R. *et al.* 1954. Inventaria Archaeologia France, Ages du Metaux, Fasc.1, F1-F6. Anvers.

Johansen, Ø. 1980. 'Nye elementer i bronsealders bosetning i Norge.' In: Thrane, H. (ed.) 1980. Broncealderbebyggelse I Norden, 10-36.

Jolly, W. 1879. 'Notes on bronze weapons and other remains found near Poolewe, Ross-shire'. Proceedings of the Society of the Antiquaries of Scotland II (2nd series), 45-49.

Jones, A. 2002. Archaeological Theory and Scientific Practice. Cambridge: Cambridge University Press.

Jones, A.J. and MacGregor, G. (eds.) 2002. Colouring the Past. The Significance of Colour in Archaeological Research. Oxford.

Jones, A.J. And MacGregor, G. 2002. 'Introduction: Wonderful Things – Colour Studies in Archaeology from Munsell to Materiality'. In: Jones and MacGregor (eds.) 2002. Colouring the Past. The Significance of Colour in Archaeological Research. Oxford, 1-22.

Jones, A.M. *et al* (eds.) 2012. Image, Memory and Monumentality. Oxford: The Prehistoric Society Research Papers No. 5.

Jones, J.D. 1966. 'Archaeological Section Report'. Proceedings of the Isle of Wight Natural History and Archaeological Society 1966, 18-19.

Jones, M. 2001. 'Plant Exploitation'. In: Champion, T.C. and Collis, J. R. (eds.) 2001. The Iron Age in Britain and Ireland: Recent Trends Sheffield: Sheffield Academic Press, 29-40.

Jones, S. 2007. 'Discourses of identity in the interpretations of the past.' In: Insoll, T. (ed.) 2007. The Archaeology of Identities. Routledge: London and New York, 44-58.

Jope, E.M. 1961. 'Daggers of the Early Iron Age in Britain'. Proceedings of the Prehistoric Society XXXII, 307-343.

Jope, E.M. 1982. 'Hallstatt D Daggers: Britain and Europe'. Bulletin of the Institute of Archaeology, University of London 19, 83-91.

Joy, J. 2009. 'Reinvigorating object biography: reproducing the drama of object lives'. World Archaeology, Vol. 41 (4), 540-556.

Keates, S. 2002. 'The Flashing Blade: Copper, Colour and Luminosity in North Italian Copper Age Society'. In: Jones and MacGregor (eds.) 2002. Colouring the Past. The Significance of Colour in Archaeological Research. Oxford, 109-125.

Kellogg, R. 1997. The Complete Sagas of Icelanders. Leifur Eiriksson.

Kendrick, T. D. 1928. The Archaeology of the Channel Islands. London.

Kendrick, T.D. and Hawkes, C.F.C. 1932. Archaeology in England and Wales, 1914-1931. London.

Keene, B. 1993. 'A tale of two axes'. Devon Archaeological Society Newsletter 55 (May 1993), 15.

Kennett, D.H. 1975. 'The New Bradwell Hoard'. Northamptonshire County Borough Museums and Art Gallery, Journal 6, 2-7.

Kienlein, T. and Ottaway, B. 1998. 'Flanged axes of the North-Alpine region: an assessment of the possibilities of use-wear analysis on metal artefacts.' In: Mordant, C., Pernot, M and Rychner, V. (eds.) 1998. L'Atelier du bronzier en Europe du XXe au VIII siècle avant notre ère. Paris: CTHS (Documents préhistoriques 10), 271.286.

Kimmig, W. 1940. Die Urnenfelderkultur in Baden. RGF 14. Berlin.

Kimmig, W. 1964. ‚Seevölkerbewegung und Urnenfelderkultur'. In: von Urslar, R. and Narr, K.J. (eds.) 1964. Studien aus Alteuropa I. Kurt Tackenberg gewidmet. Beihefte der Bonner Jahrbücher 10/1, 220-283.

Kimmig, W. 1969. ‚Zum Problem späthallstättischer Adessitze'. In: Frey, O.-H. and Hermann, J. (eds.) 1969. Siedlung, Burg und Stadt. Studien zu ihren Anfängen. Berlin, 95-113.

King, E. 1812. 'A Description of Antiquities discovered on Hagbourn Hill'. Archaeologia XVI, 348ff.

Kopytoff, I. 1986. ‚The cultural biography of things: commoditization as process'. In: Appadurai, A. (ed.) 1986. The Social Life of Things: Commodities in Cultural Perspectives. Cambridge, 64-91.

Kossack, G. 1959. Südbayern während der Hallstattzeit. Berlin.

Kossack, G. 1981. ‚Gedanken zur Periodisierung der Hallstattzeit'. In: Die Hallstattkultur. Bericht über das Symposium in Steyr 1980. Linz.

Kossack, G. 1995. 'Mitteleuropa zwischen dem 13. und 8. Jahrhundert v. Chr. Geb. Geschichte, Stand und Probleme der Urnenfelderforschung. In: zu Erbach, M. *et al.* 1995. Die Urnenfelderzeit nördlich und südlich der Alpen. Ergebnisse eines Kolloquiums. Bonn, 1-64.

Kossinna, G. 1911. Die Herkunft der Germanen. Leipzig: Kabitzsch.

Kromer, K. 1959. Das Gräberfeld von Hallstatt. Firenze: Sansoni.

Kromer, K. 1982. ‘Gift Exchange and the Hallstatt Courts’. Bulletin of the University of London Institute of Archaeology 19, 21ff.

de Laet, S.J. 1974. Prehistorische kulturen in het zuiden der Lage Landen. Wetteren.

Lambrick, G., Robinson, M. and Allen, T. 2009. The Archaeology of the Gravel Terraces of the Upper and Middle Thames. The Thames Valley in Late Prehistory: 1500BC-AD50. Oxford.

La Roux, C.-T. 1990. ‘Riec-sur-Belon’. Gallia Informations 1990 (1-2), 38-39.

Larson, A. 1980. ‘A Late Bronze Age hoard from Beeston Regis, Norfolk’. Antiquity LIV, p. 217-219.

Laver, H. 1896a. ‘Founder’s Hoard from Hatfield Broad Oak, Essex’. Antiquaries Journal XVI (second series), 96-98.

Laver, H. 1896b. ‘Founder’s Hoard from Southchurch, near Southend, Essex.’ Antiquaries Journal XVI (second series), 98-99.

Laver, H. 1898. ‘Founder’s Hoard at Hatfield Broad Oak’. Transactions of the Essex Archaeological Society VI (New Series), 172-173.

Lawrence, G.F. 1929. ‘Antiquities from the Middle Thames’. Archaeological Journal 86, 69-99.

Lawson, A.J. 1980. ‘The Hilgay Hoard’. Norfolk Archaeology XXXVII, 328-333.

Lawson, A.J. 1980. ‘The Horning Hoard’. Norfolk Archaeology XXXVII, 333-338.

Lawson, A.J. 1999. ‘The Bronze Age Hoards of Hampshire’. In: Harding, A.F. 1999. Experiment and Design. Archaeological Studies in Honour of John Coles. Oxford.

Lawson, A.J. and Allen, M.J. 2000. Potterne 1982-5. Animal husbandry in later prehistoric Wiltshire. Salisbury

Layton, T. 1877. ‘A large collection of bronze weapons and implements…’ Archaeological Journal. 34, 301.

Leach, E. 1968. ‘Ritual’. In: Sills. D.L. (ed) 1968. International encyclopaedia of the social sciences. New York: Macmillan and Free Press, 520-526.

Leahy, K. 1985. ‘An Iron Age Ribbed Bracelet from Roxby, South Humberside’. Lincolnshire History and Archaeology 20, 79.

Leahy, K. 1999. ‘An Iron Age Bracelet from Belton, North Lincolnshire’. Lincolnshire Archaeology and History 34, 36.

Leeds, E.T. 1930. 'A Bronze Cauldron from the river Cherwell, Oxfordshire, with notes on cauldrons and other bronze vessels of allied types'. Archaeologia XXX, 1-36.

Leeds, E.T. 1935. 'Recent Iron Age Discoveries in Oxfordshire and North Berkshire'. Antiquaries Journal XV, 30-42.

Leeds, E.T. 1939. 'Bronze Age'. Victoria County History Oxford, Vol. I, 241-251.

Lethbridge, T.C. and O'Reilly, M.M. 1931. 'Archaeological Notes', Proceedings of the Cambridge Antiquarian Society XXXI, 150-155.

Lethbridge, T.C. and O'Reilly, M.M. 1932. 'Archaeological Notes', Proceedings of the Cambridge Antiquarian Society XXXII, 59-67.

Lethbridge, T.C. and O'Reilly, M.M. 1934. 'Archaeological Notes', Proceedings of the Cambridge Antiquarian Society XXXIV, 88-93.

Levy, J. 1982. 'Social and Religious Organisation in Bronze Age Denmark: An Analysis of Ritual Hoard Finds.' Oxford: British Archaeological Reports (BAR International Series 124).

Linford, N. 1993. 'TOWER HILL, Ashbury, Oxfordshire. Report on geophysical survey, March 1993' http://www.eng-h.gov.uk/reports/tower_hill/

Locock, M. 2001. 'A Later Bronze Age landscape on the Avon Levels: settlement, shelters and saltmarsh at Cabot Park'. In: Brück, J. (ed.) 2001. Bronze Age Landscapes. Tradition and Transformation. Oxford, 121-128.

Lodwick, M. and Gwilt, A. 2004. 'Cauldrons and consumption: Llanmaes and Llyn Fawr'. Archaeology in Wales 44, 77-81.

Lodwick, M. and Gwilt, A. 2005. 'Continuing excavations at Llanmaes, Vale of Glamorgan'. Archaeology in Wales 45, 91-92.

Lodwick, M., Gwilt, A. and Deacon, J. 2006. 'Excavation at Llanmaes, Vale of Glamorgan, 2006'. Archaeology in Wales 46, 42-48.

Lodwick, M. and Gwilt, A. 2007. 'Exploratory excavation of a later prehistoric and Roman-British enclosure at Llanmaes, Vale of Glamorgan'. Archaeology in Wales 47, 78-92.

Lodwick, M. and Gwilt, A. 2008. 'Recent fieldwork at Llanmaes, Vale of Glamorgan'. Archaeology in Wales 48, 67-69.

Lodwick, M. and Gwilt, A. 2009. 'The 'champion's portion'? prehistoric feasting at Llanmaes'. Current Archaeology 233, 29-35.

Lort, Rev. Mr. 1779. 'Observations on Celts'. Archaeologia V, 106ff.

Lowther, A.W.G. 1945. 'Iron Age Pottery from Wisley, Surrey'. Proceedings of the Prehistoric Society XI, 32-38.

Lowther, A.W.G. 1946. 'Report on the Excavations at the site of the Early Iron Age Camp in the Grounds of Queen Mary Hospital, Carshalton, Surrey'. Surrey Archaeological Collections Vol. 49, 56-75.

Lowther, A.W.G. 1950. 'Iron Age Pottery, Weybridge'. Surrey Archaeological Collections Vol. 51, 144-147.

Lynch, F. 1965. 'A socketed axe and a palstave from Anglesey'. Transactions of the Anglesey Antiquarian Society and Field Club (1965), 2-6.

Lynch, F. 1989. 'Prehistory – Anglesey – Bodwrog Hoard'. Archaeology in Wales 29, 41-50.

Lynch, F. 1991. Prehistoric Anglesey. The archaeology of the island to the Roman conquest. Llangefni.

Lynch, F., Davies, J.L. and Aldhouse-Green, S. 2000. Prehistoric Wales. Midsomer Norton.

MacCormick, A.G. 1964. 'Newark'. East Midland Archaeological Bulletin, Vol. 7, 23.

MacCormick, A.G. 1966. 'Holme Pierrepoint'. East Midland Archaeological Bulletin, Vol. 9, 36.

MacCormick, A.G. 1974. 'Holme Pierrepoint'. East Midland Archaeological Bulletin, Vol. 10, 41-42.

MacDonald, J. 1978. 'An iron dagger in the Royal Ontario Museum'. In: Bird, J., Chapman, H. and Clark, J. (eds.) 1978. Collectanea Londiniensa. Studies in London Archaeology and History presented to Ralph Merrifield. London and Middlesex Archaeological Society, 44-52.

MacKie, E.W. *et al.* 1971. 'Some aspects of the transition from the bronze- to iron using periods in Scotland'. Scottish Archaeological Forum 3, 55-72.

Mackreth, D. 1982. 'Tregate Castle Mystery'. Monmouth Archaeology 9, 1-2.

MacGregor, A. (ed.) 1987. Antiquities form Europe and the Near East in the Collection of The Lord McAlpine of West Green. Oxford.

Maier, R.A. 1977. 'Urgeschichtliche Opferreste au seiner Felsspalte und einer Schachthöhle der Fränkischen Alb.' Germania 55, 21-32.

Malcolm, J. 1877. 'Bronze Celt from Argyllshire'. Antiquaries Journal VII, 196.

Manby, T.G. and Turnbull, P. (eds.) 1986. 'Archaeology in the Pennines. Studies in honour of A. Rainstrick' Oxford: British Archaeological Reports (British Series) 158.

Manby, T.G. 1986. 'The Bronze Age in Western Yorkshire'. In: Manby, T.G. and Turnbull, P. (eds.) 1986. 'Archaeology in the Pennines. Studies in honour of A. Rainstrick'. Oxford: British Archaeological Reports (British Series) 158, 55-127.

Manby, T.G. (ed.) 1988. Archaeology in Eastern Yorkshire. Essays in honour of T.C.M. Brewster, FSA. Sheffield.

Manning, W.H. and Saunders, C. 1972. 'A Socketed Iron Axe from Maids Moreton, Buckinghamshire, with a note on the type'. Antiquaries Journal LII, 276-292.

Mansfeld, G. 1973. 'Die Fibeln der Heuneburg 1950-1970: ein Beitrag zur Geschichte der Späthallstattfibel'. Römisch-Germanische Forschungen, Band. 33. Berlin.

Maraszek 2000. 'Late Bronze Age axe hoards in western and northern Europe'. In: Pare, C. (ed.) 2000. Metal makes the World go round. Oxford, 209-224.

Mariën, M.E. 1953. Inventaria Archaeologia Belgique. Ages du Metaux, Fasc. 1, B1-B10. Auvers.

Mariën, M.E. 1958. Trouvailles du Champs d'Urnes et des Tombelles hallstattiennes de Court-St-Étienne. Bruxelles.

Mariën, M.E. 1975. 'Épées de Bronze « Proto-Hallstattiennes » et Hallstattiennes découvertes en Belgique'. Helinium XV, 14-37.

Mariën, M.E. 1989. 'Aperçu de la période hallstatienne en Belgique'. In: Otte, M. and Ulrix-Closset, M. (eds) 1989. Le civilisation Hallstatt. Rencontre Internationale. Liège.

Mariën, M.E. 1999. 'Nécropole hallstattiennes à tombelles dans le « Bois de la Taille des Vignes » à Havré (Hainaut, Belgique)'. In : Chaume, B. *et al.* 1999. Archéologie des Celtes. Mélanges à la mémoire de René Joffroy (Protohistoire Européenne 3), 227-242.

Marjoram, S. 1974. 'Archaeological Notes, 1973'. Lincolnshire History and Archaeology 9, 17-35.

Marshall, Y. 2008. 'The social lives of lived and inscribed objects'. Journal of the Polynesian Society, 117 (1), 59-101.

Martin, E.A. 1980. 'A Late Bronze Age sword from Brandon'. Proceedings of the Suffolk Institute of Archaeology and History XXXV (part 4), 281-282.

Martin, E. *et al.* 1983. 'Archaeology in Suffolk 1984'. Proceedings of the Suffolk Institute of History and Archaeology XXXV, part 3, 229ff.

Martin, E. *et al.* 1986. 'Archaeology in Suffolk 1985'. Proceedings of the Suffolk Institute of Archaeology and History XXXVI, 139ff.

Martin, E. *et al.* 1990. 'Archaeology in Suffolk 1989'. Proceedings of the Suffolk Institute of Archaeology and History XXXVII, 147ff.

Martin, E. *et al.* 1993. 'Archaeology in Suffolk 1992'. Proceedings of the Suffolk Institute of Archaeology and History XXXVIII, 79ff.

Martin, E. *et al.* 1997. 'Archaeology in Suffolk 1996'. Proceedings of the Suffolk Institute of Archaeology and History XXXIX, 77ff.

Martin, E. *et al.* 1998. 'Archaeology in Suffolk 1997'. Proceedings of the Suffolk Institute of Archaeology and History XXXIX, 209ff.

Martin, E. *et al.* 1999. 'Archaeology in Suffolk 1998'. Proceedings of the Suffolk Institute of Archaeology and History XXXIX, 353ff.

Martin, E. *et al.* 2000. 'Archaeology in Suffolk 1999'. Proceedings of the Suffolk Institute of Archaeology and History XXXIX, 495ff.

Martin, E. *et al.* 2002. 'Archaeology in Suffolk 2001'. Proceedings of the Suffolk Institute of Archaeology and History XL, 201ff,

Mauss, M. 2013. Die Gabe. Form und Funktion des Austausches in archaischen Gesellschaften. Frankfurt am Main.

May, J. (ed.) 1964. 'Nottinghamshire'. East Midlands Archaeological Bulletin 7, 22ff.

May, J. (ed.) 1966. 'Nottinghamshire'. East Midlands Archaeological Bulletin 9, 35ff.

Mayer, E.F. 1979. 'Bronzezeitliche Passfunde im Alpenraum.' Jahresbericht des Instituts für Vorgeschichte der Universität Frankfurt/Main 1978/1979, 179-87.

Medlycott, M. 2011 (ed.) 'Research and Archaeology Revisited: a revised framework for the East of England.' East Anglian Archaeology Occasional Paper 24.

Megaw, J.V.S. 1965. 'A Bronze Spearhead from the Heathery Burn Cave, Co. Durham'. Antiquaries Journal XLV, 112-114

Megaw, V. 2012. 'Go East Young Man!' Antipodean thoughts on the earliest La Tène art in Slovakia (with particular reference to the fortified settlement of Horné Orešany)' In: Archeológia Na Prahu Histórie. K životnému jubileu Karola Pietu. Nitra 2012, 447–460.

Meillassoux, C. 1968. 'Ostentation, destruction, reproduction.' Economie et Société I, 93-105.

Melas, E.M. 1989. 'Etics, emics and empathy in archaeological theory'. In: Hodder, I. (ed.) 1989. The Meaning of Things: Material Culture and Symbolic Expression. Abingdon: Routledge, 137-155.

Mercer, R. *et al*. 1981. 'Excavation at Carn Brea, Illogan, Cornwall – a Neolithic Fortified Complex of the Third Millennium BC'. Cornish Archaeology 20, 1-205.

Merhart, G. v. 1952. 'Studien über einige Gattungen von Bronzegefäßen.' In: Festschrift des Römisch-Germanischen Zentralmuseums zur Feier seines hundertjährigen Bestehens, 1-71.

Merhart, G. v. 1956. 'Über blecherne Zierbuckel (Faleren)'. Jahrbuch des Römisch-Germanischen Zentralmuseums in Mainz 3, 28-116.

Meskell, L. 2002. 'The Intersections of Identity and Politics in Archaeology.' Annual Review of Anthropology 31, 279-301.

Meskell, L. 2007. 'Archaeologies of Identities'. In: Insoll, T. (ed.) 2007. The Archaeology of Identities. Routledge: London and New York, 23-43.

Meskell, L. (ed.) 2008. Archaeologies of Materiality. Oxford: Blackwell.

Metz, W. H., Beek, B. L. and Steegstra, H. (eds.) 2001. Patina : essays presented to Jay Jordan Butler on the occasion of his 80th birthday. Groningen.

Metzner-Nebelsick, C. 1994. ‚Die früheisenzeitliche Trensenentwicklung zwischen Kaukasus und Mitteleuropa'. In: Archäologische Untersuchungen zum Übergang von der Bronze- zur Eisenzeit zwischen Nordsee und Kaukasus. Ergebnisse eines Kolloquiums in Regensburg 28.-30. Oktober 1992. Regensburger Beiträge zur Archäologie 1, 383-447.

Meyer, M. 1984/85. 'Hallstatt Imports in Britain'. Inst. of Archaeology, University of London, 21/22, 69-84.

Meyrick, O. 1947. 'Notes on some Early Iron Age sites in the Marlborough Downs'. Wiltshire Archaeological and Natural History Magazine Vol. 51, 256-263.

McNeil, R. 1973. 'A report on the Bronze Age hoard from Wick Park, Stogursey, Somerset'. Proceedings of the Somerset Archaeological and Natural History Society 117, 47ff.

McOmish, D. 1996. 'East Chisenbury: ritual and rubbish at the British Bronze Age-Iron Age transition.' Antiquity 70, 68-76.

McWhirr, A. 1971-72. 'Archaeology in Leicestershire and Rutland, 1970-72'. The Leicestershire Archaeological and Historical Society XLVII, 62-77.

Middleton, A.P. 1987. 'Technological investigation of the coarings on some 'hematite –coated' pottery from southern England.' Archaeometry 29, 2, 250-261.

Middleton, A.P. 1995. 'Prehistoric red-finished pottery from Kent'. In: Kinnes, I. and Vardell, G. (eds.) 1995. Unbaked Urns of Rudely Shape: Essays on British and Irish Pottery, Oxford, 203-210.

Milcent P.-Y. 2012. Le temps des élites en Gaule atlantique. Chronologie des mobiliers et rythmes de constitution des dépôts métalliques dans le contexte européen (XIII^{e}-VII^{e} s. av. J.-C.). Rennes.

Miles, H. 1977. 'Excavations at Killibury Hillfort, Egloshayle 1975-6', Cornish Archaeology 16, 89-121.

Miller, D. 1982. 'Artefacts as products of human categorisation processes'. In: Hodder, I. (ed.) 1982. Symbolic and Structural Archaeology. Cambridge: Cambridge University Press, 17-25.

Miller, D. 1985: Artefacts as categories: a study of ceramic variability in central India. Cambridge: Cambridge University Press.

Miller, D. and Tilley, C. (eds.) 1984, Ideology, Power and Prehistory. Cambridge: Cambridge University Press.

Milne, G. *et al.* 1997. 'An archaeological study of the tidal Thames'. World Archaeology 29 (1), 130-146.

Montelius, O. 1885. 'Om tidsbestaemning inom Bronzeåldern med saerskildt afseende på Skandinavien'. Kongl. Vitterhets Historie och Antiqvitets Akademiens Handlinger 30, ny följd, 10. Stockholm.

Montelius, O. 1908. 'The Chronology of the British Bronze Age'. Archaeologia LXI, 97-162.

Moore, A. 1992. Cultural Anthropology. The Field Study of Human Beings. San Diego.

Moore, C.N. 1969a. 'Looped palstave and a socketed axe from the Marlborough area'. Wiltshire Archaeological and Natural History Magazine 64, 114-115.

Moore, C.N. 1969b. 'A socketed axe from Tollard Royal'. Wiltshire Archaeological and Natural History Magazine. 64, 116-117.

Moore, C.N. 1978a. 'A bronze sword from the River Thames'. Transactions of the London and Middlesex Archaeological Society 29, 148-150.

Moore, C.N. 1978b. 'The South Welsh Axe: Its Origins and Distribution'. Archaeological Journal 135, 57-66.

Moore, C.N. 1978c. 'A Bronze Sword from the Thames'. Transactions of the London and Middlesex Archaeological Society 29, 148-149.

Moore, C.N. and Lewis, E.R. 1969. 'A Hoard of Breton Socketed Axes from Nether Wallop'. Proceedings of the Hampshire Field Club and Archaeological Society XXVI, 19-21

Moore, C.N. and Rowlands, M.J. 1972. Bronze Age Metalwork in the Salisbury Museum. Salisbury.

Moore, I.E. 1949. 'Bronze Age axes from Halesworth and District'. Proceedings of the Suffolk Institute of Archaeology. XXIV, 121-125.

Moore, J. and Scott, E. (eds.) 1997. Invisible People and Processes. London: Leicester University Press.

Monckton, Mr. 1933. 'A bronze hoard from the City'. Antiquaries Journal XIII, 297-299.

Mordant, C., Pernot, M and Rychner, V. (eds.) 1998. L'Atelier du bronzier en Europe du XXe au VIII siècle avant notre ère. Paris: CTHS (Documents préhistoriques 10)

Moreland, J. 1999. 'The world(s) of the cross'. World Archaeology Vol. 31 (2), 194-213.

Morris, E.L. 1996. 'Iron Age Artefact Production and Exchange'. In: Champion, T. and Collis, J. 1996 (eds). The Iron Age in Britain and Ireland: Recent Trends. Sheffield, 41-65.

Moule, H.J. 1900. 'Notes on Bronze'. Proceedings of the Dorset Natural History and Archaeological Field Club XXI, 40-105.

Moule, H. 1904. 'A hoard of bronze implements found at Lulworth'. Proceedings of the Dorset Natural History and Archaeological Field Club XXV, xxiiif.

Müller, S. 1876. 'Broncealderens Perioder. En Undersøgelse i forhistorisk Archaeologie'. Årbøger for Nordisk Oldkyndighed, 215-251.

Müller-Karpe, H. 1959. Beiträge zur Chronologie der Urnenfelderzeit nördlich und südlich der Alpen. Bonn.

Müller-Karpe, H. 1966. 'Ein Bronzemesser von Zürich-Bauschanze'. In: Degen, R., Drack, W. and Wyss, R. (eds.) 1966: Helvetia Antiqua: Festschrift Emil Vogt. Zürich, 97-100.

Müller-Karpe, H. 1974. 'Zur Definition und Benennung chronologischer Stufen der Kupferzeit, Bronzezeit und älteren Eisenzeit'. Jahresbericht des Institutes for Vorgeschichte der Universität Freiburg, 7-18.

Mullin, D. 2012. 'The River has never divided us: Bronze Age metalwork deposition in Western Britain'. Oxford Journal of Archaeology 31 (1), 47-57.

Musson, C.R. 1991. The Breiddin Hillfort. A later prehistoric settlement in the Welsh Marches. CBA Research Report 76.

Musson, C.R. *et al.* 1992. 'Excavations and Metal-working at Llwyn Bryn-dinas Hillfort, Llangedwyn, Clwyd'. Proceedings of the Prehistoric Society 58, 265-283.

Naue, J. 1903. Die vorrömischen Schwerter aus Kupfer, Bronze und Eisen. München

Nash-Williams, V.E. 1933. 'A Late Bronze Hoard from Cardiff'. Antiquaries Journal XIII, 299-300.

Nash-Williams, V.E. (ed.) 1946. A hundred years of Welsh Archaeology. Gloucester.

Needham, S. 1979. 'Two recent British shield finds and their Continental parallels'. Proceedings of the Prehistoric Society 45, 111-34.

Needham, S. 1990. The Petters Late Bronze Age Metalwork. An analytical study of Thames Valley metalworking in its settlement context. British Museum Occasional Paper No. 70.

Needham, S. 1991. Excavation and salvage at Runnymede Bridge, 1978: The Late Bronze Age waterfront site. London.

Needham, S. 1996. 'Chronology and Periodisation in the British Bronze Age'. Acta Archaeologica 67, 121-140.

Needham, S. 2004a. *The bronze sword*. In: Pacitto, A.L. 2004: English Heritage Excavations at Scarborough Castle, 1978., p. 217-220. In: Rigby, V.

2004. Pots in Pits: The British Museum East Yorkshire Settlements Project, 1988-1992. East Riding Archaeologist Vol. 11.

Needham, S. 2004b. 'St Erth, Cornwall: Two Late Bronze Age base-metal hoards and two pieces of ancient gold (2002T278)'. Treasure Annual Report 2002, 20-22.

Needham, S. 2007. '800BC: The Great Divide'. In: Haselgrove, C. and Pope, R. 2007 (eds.) 2007. The Earlier Iron Age in Britain and the Near Continent. Oxford, 39-63.

Needham, S. 2009. 'A2 The hafted socketed bronze axe-head'. In: Hayman, Jones and Poulton 2009. Settlement sites and sacred offerings. Prehistoric and later archaeology in the Thames valley near Chertsey. Surrey County Archaeology Unit. Woking.

Needham, S. and Burgess, C. 1980. 'The later Bronze Age in the Lower Thames Valley: the metalwork evidence'. In: Barrett, J. and Bradley, R. (eds.) 1980. Settlement and Society in the British Later Bronze Age. British Archaeological Reports (BAR British Series 83). 437-471.

Needham, S. and Longley, D. 1980. 'Runnymede Bridge 1976: Excavations on the sire of a Late Bronze Age settlement'. Research Volume of the Surrey Archaeological Society, Vol. 6.

Needham, S. *et al*. 1986. 'The Metalwork'. In: O'Connell, M. (ed.) 1986. 'Petters Sports Field, Egham. Excavation of a Late Bronze Age/Early Iron Age Site'. Research Volume of the Surrey Archaeological Society, No. 10, 22-57.

Needham, S. *et al.* 1988. 'A Technological Study of the Ham Hill Stone Moulds'. Proceedings of the Somerset Archaeological and Natural History Society 132, 15-21.

Needham, S. *et al.* 1997. 'An Independent Chronology for British Bronze Age Metalwork: The Results of the Oxford Radiocarbon Accelerator Programme'. Archaeological Journal 154, 55-107.

Nicholson, S.M. (ed.) 1980. Catalogue of the Prehistoric Metalwork in Merseyside County Museums. Liverpool.

Northover, P. 1982. 'The exploration of the long-distance movement of bronze in Bronze and Early Iron Age Europe'. Bulletin of the Institute of Archaeology, University of London 19, 45-92.

Northover, P. 1984. 'Iron Age bronze metallurgy in central southern England'. In: Cunliffe, B. and Miles, D. (eds.) 1984. Aspects of the Iron Age in Central Southern Britain. Oxford: Oxford University Committee for Archaeology, 126-145.

Northover, P. 1988. 'The Late Bronze Age metalwork: General discussion'. In: Cunliffe, B. *et al.* 1988. Mountbatten, Plymouth, 75-85.

Northover, P. 1995. 'The technology of metalwork. Bronze and Gold.' In: Green, M. 1995. The Celtic World. London, 284-309.

Northover, P. 2004. Analysis of Bronze Hoards from Tower Hill, Figheldean Down and King's Weston Hill. Oxford (unpublished report).

Northover, P. and Sherratt, A. 1987. 'Hoards and other groupings represented in the catalogue'. In: MacGregor, A. (ed.) 1987. Antiquities form Europe and the Near East in the Collection of The Lord McAlpine of West Green. Oxford, 17ff.

'Notes' 1928. 'Bronze Hoard from Suffolk'. Antiquaries Journal VIII, 236-237.

'Notes' 1929. 'Flesh-hook from Cambridgeshire'. Antiquaries Journal IX, 255-56.

'Notes' 1930. 'An early Italian brooch from Yorkshire'. Antiquaries Journal X, 54-55.

'Notes' 1932. 'Bronzes of the Early Iron Age from Yorkshire'. Antiquaries Journal XII, 453-455.

'Notes' 1934. 'Notes – Scarborough and Hallstatt'. Antiquaries Journal XIV, 301-302.

'Notes' 1969. 'Notes – Looped Palstave and Socketed Axe from Marlborough Area'. Wiltshire Archaeological and Natural History Magazine Vol. 64, 114-115.

'Notes and Queries' 1924. 'Hallstatt brooches in Sussex'. Sussex Archaeological Collections LXV, 253-254.

Du Noyer, G.V. 1847a. 'On the Classification of Bronze Celts'. Archaeological Journal IV, 1-7.

Du Noyer, G.V. 1847b. 'Bronze Celts, and Celt Moulds of Stone and Bronze.' Archaeological Journal IV, 327-352.

O'Connell, M. and Needham, S. 1977. 'A Late Bronze Age Hoard from a Settlement at Petters Sports Field, Egham, Surrey'. The London Archaeologist 3 (5), 123-130.

O'Connell, M. (ed.) 1986. 'Petters Sports Field, Egham.Excavation of a Late Bronze Age/Early Iron Age Site'. Research Volume of the Surrey Archaeological Society, No. 10.

O'Connor, B. 1975. 'Six phalerae in the London Museum and a discussion of other phalerae from the British Isles'. Antiquaries Journal LV, 215-226.

O'Connor, B. 1980. Cross-channel relations in the later Bronze Age. Oxford.

O'Connor, B. and Cowie, T. 1985. 'A group of bronze socketed axes from Eildon Mid Hill, near Melrose, Roxburghshire'. Proceedings of the Society of the Antiquaries of Scotland 115, 151-58.

O'Connor, B. 2007a. 'Llyn Fawr Metalwork in Britain: A Review'. In: Pope, R. and Haselgrove, C. 2007. The earlier Iron Age in Britain and the Near Continent. Oxford.

O'Connor, B. 2007b. 'Two Late Bronze Age socketed axes from Tillicoultry, Clackmannanshire, and similar lost axes from northern Britain'. Tayside and Fife Archaeological Journal 13, 74-79.

O'Neill Osbourne, A. 1939. 'The Hayne Wood Hoard, Saltwood, Kent'. Antiquaries Journal XIX, 202-206.

O'Neil, B.H. St. J. 1941. 'Hoard of Axes from Bourton-on-the-Water, Gloucestershire'. Antiquaries Journal XXI, 150-151.

O'Neil, B.H. and Hemp, W.J. 1943. 'Excavations at Ffridd Faldwyn Camp, Montgomery, 1937-39'. Archaeologia Cambrensis XCVII, 53-90.

Oliver, V.L. 1937. 'Bronze Age rapiers and swords from Dorset'. Proceedings of the Dorset Natural History and Archaeological Society 58, 26-30.

Olivier, L. 1993. 'La nécropole de tumulus d'Haroué "Bois de la Voivre" (Meurthe-et-Moselle): Essai d'analyse spatiale d'une aire funéraire du premier Age du Fer'. Archaeologia Mosellana 2, 115-147.

Osgood, R. 1995. 'Three Bronze Phalerae from the River Avon, near Melksham'. Wiltshire Archaeological and Natural History Magazine 88, 50-59.

Otte, M. and Ulrix-Closset, M. (eds) 1989. Le civilisation Hallstatt. Rencontre Internationale. Liège.

Overing, J. and Passes, A. (eds.) 2000. The Anthropology of Love and Anger: the aesthetics of conviviality in Native Amazonia. London.

Owen, J. 1992. 'Three Bronze Socketed Axes from South Kyme'. Lincolnshire History and Archaeology 27, 40-41

Palmer, C. *et al.* 1999. 'Archaeological Excavations in the Arrow Valley, Warwickshire'. Transactions of the Birmingham and Warwickshire Archaeological Society 103.

Pare, C.F.E. 1987. 'Wagenbeschläge der Bad Homburg Gruppe und die kulturgeschichtliche Stellung des hallstattzeitlichen Wagengrabes von Wehringen, Kr. Augsburg'. Archäologisches Korrespondenzblatt 17, 467-482.

Pare, C.F.E. 1991a. '*Fürstensitze*, Celts and the Mediterranean World: Developments in the West Hallstatt Culture in the 6th and 5th Centuries BC'. Proceedings of the Prehistoric Society 57, part 2, 183-202.

Pare, C.F.E. 1991b. 'Swords, Wagon-Graves and the Beginning of the Early Iron Age in Central Europe'. Kleine Schriften aus dem Vorgeschichtlichen Seminar Marburg 37.

Pare, C.F.E. 1992. Wagons and Wagon-Graves of the Early Iron Age in Central Europe. Oxford.

Pare, C.F.E. 1996. 'Chronology in Central Europe at the end of the Bronze Age'. In: Acta Archaeologica 67, 99-120.

Pare, C.F.E. 2000. 'Bronze and the Bronze Age'. In: Pare, C. (ed.) 2000. Metal makes the World go round. Oxford, 1-38.

Pare, C.F.E. (ed.) 2000. Metal makes the World go round. Oxford.

Parker Brewis, W. 1923. 'The Bronze Sword in Great Britain'. Archaeologia LXXIII, 253-265.

Parker Pearson, M. 1982: 'Mortuary Practices, Ideology and Society: an ethno-archaeological study.' In: Parker Pearson, M. and Richards, C. (eds.) 1982. Architecture and Order: Approaches to Social Space. London: Routledge, 38-72.

Parker Pearson, M. and Richards, C. (eds.) 1982. Architecture and Order: Approaches to Social Space. London: Routledge.

Parker Pearson, M. and Syde, R.E. 1997. 'Iron Age Enclosures, Sutton Common, S. Yorkshire'. Proceedings of the Prehistoric Society 63, 221-261.

Passmore, A.D. 1926. 'Early Iron Age Antiquities from North Wiltshire'. Wiltshire Archaeological and Natural History Magazine XLIV, 333-354.

Passmore, A.D. 1932. 'A Hoard of Bronze Implements from Donhead St Mary, and a stone mould from Bulford, in Farnham Museum, Dorset'. Wiltshire Archaeological and Natural History Magazine XLV, 373-376.

Pautreau, J-P. 1989. 'The transition from Bronze to Iron Age in France: Economic, Cultural and Spiritual Change'. In: Stig-Sørensen, M.L. and Thomas, R. (eds.) 1989. The Bronze-Iron Age transition in Europe:

aspects of continuity and change in European societies, c. 1200-500BC. Oxford, 204-262.

Peacock, B.A. 1966. 'Holme Pierrepoint'. East Midlands Archaeological Bulletin, Vol. 9, 36.

Pearce, S.M. 1976-77. 'Amber beads from the late bronze-age hoard from Glentanar, Aberdeenshire'. Proceedings of the Society of Antiquities of Scotland 108, 124-129.

Pearce, S.M. 1976. 'The Middle and Late Bronze Age Metalwork of the South-West and its relationship to settlement'. Proceedings of the Devon Archaeological Society 34, 17-41.

Pearce, S.M. 1981. The archaeology of South-Western Britain. London.

Pearce, S.M. 1983. The Bronze Age Metalwork of South Western Britain. Oxford.

Pearce, S.M. 1984. Bronze Age Metalwork in Southern Britain. Aylesbury.

Pels, P. 1998. 'The spirit of matter: On fetish, rarity, fact and fancy'. In Spyer, P. (ed.) 1998. Border Fetishisms: Material Objects in Unstable Places. New York: Routledge, 91-121.

Pendleton, C. 1999. Bronze Age Metalwork in Northern East Anglia – A study of its distribution and interpretation. Oxford.

Pendleton, C. 2001. 'First, let's get rid of ritual'. In: Brück, J. 2001 (ed.). Bronze Age Landscapes: Tradition and Transformation. Oxford: Oxbow 2001, 170-178.

Perkins, D.R.J. 1989. 'A Late Bronze Age Hoard from Shuart, Thanet'. Archaeologia Cantiana CVI, 201-204.

Perkins, D.R.J. and Chadwick-Hawkes, S. 1984. 'The Thanet Gas Pipeline Phases I and II (Monkton Parish), 1982'. Archaeologia Cantiana CI, 83-115.

Perkins, D.R.J. 1991. 'A Late Bronze Age hoard found at Monkton Court Farm, Thanet'. Archaeologia Cantiana CIX, 1991, 247-265.

Perkins, D.R.J. *et al.* 1994. 'Monkton Court Farm evaluations, 1992.' Archaeologia Cantiana CXIV, 237-317.

Perkins, D.R.J. 1997. 'The Birchington III Hoard'. Archaeologia Cantiana CXVII, 232-237.

Perkins, D.R.J. 1998a. 'The Hoaden (II) Bronze Hoard'. Archaeologia Cantiana, CXVIII, 365-371.

Perkins, D.R.J. 1998b. ‘Bronzes. The Cleve Court Hoard’. Archaeologia Cantiana CXVIII, 361-165.

Peroni, R. 1973. Studi di cronologia hallstattiana. Roma.

Phillips, W. 1864. ‘Antiquities and Works of Art Exhibit’. Archaeological Journal XXI, 90.

Phillips, W.E. 1967. ‘Bronze Age metal objects in Surrey’. Surrey Archaeological Collections Vol. 64, 1-35.

Phillips, W.E. 1968. ‘A Note on the Carshalton Hoard’. Surrey Archaeological Collections Vol. 65, 130-133.

Pieta, K. 2005. ‚Spätlatènezeitliche Waffen und Ausrüstung im nördlichen Teil des Karpatenbeckens‘. Slovenská archeológia 53, 35-84.

Pieta, K. 2014. ‚Rituelle Beile aus dem Frühlatène-Burgwall in Horné Orešany/Rituálne sekery z včasnolaténskeho hradiska Horné Orešany‘. In: MORAVSKÉ KŘIŽOVATKY . Střední Podunají mezi pravěkem a historií. Moravské zemské museum. Brno 2014, 717-727

Piggott, C.M. 1942. ‘Five Late Bronze Age Enclosures in North Wiltshire’. Proceedings of the Prehistoric Society VIII, 48-62.

Piggott, C.M. and Seaby, W.A. 1937. ‘Early Iron Age site at Southcote, Reading’. Proceedings of the Prehistoric Society (New Series) III, 43-57.

Piggott, S. 1946. ‘The Late Bronze Age razors of the British Isles’. Proceedings of the Prehistoric Society (New Series) XII, 121-141.

Piggott, S. 1972. ‘A note on climatic deterioration in the first millennium BC in Britain.’ Scottish Archaeological Forum 3, 63-70.

Piggott, S. 1973. ‘The final phase of bronze technology’. In: Crittall, E. (ed.) 1973. Victoria County History: Wiltshire, Part II. London.

Piggott, S. 1989. Ancient Britons and the antiquarian imagination. London.

Pike, A. 1992. ‘Archaeological Notes’. Records of Buckinghamshire 34, 185-190.

Plot, Dr. 1686. Natural History of Staffordshire. One plate is reproduced in: Staffordshire Arch. Studies 1, 1984. City Museum and Art Gallery Stoke-on-Trent.

Polenz, H. 1973. 'Zu den Grabfunden der Späthallstattzeit im Rhein-Main Gebiet'. Berichte der Römisch-Germanischen Kommission 54, 107-202.

Pollitt, W. 1932. 'Bronze objects from south-east Essex'. Antiquaries Journal XII, 74.

Posnansky, M. 1956. 'The Bronze Age Round Barrow at Swarkeston'. Journal of the Derbyshire Archaeological and Natural History Society LXXVI, 10-27.

Powell, T.G.E. 1948. 'A Late Bronze Age Hoard from Welby, Leicestershire'. ANL (1948) 1, 8-9.

Powell, T.G.E. 1950. 'A Late Bronze Age hoards form Welby, Leicestershire'. Archaeological Journal, CV (for the year 1948), 27-40.

Powell, T.G.E. 1963. 'Excavations at Skelmore Heads near Ulverston'. Transactions of the Cumberland and Westmoreland Antiquarian and Archaeological Society (2), 72, 53-56.

Powell, T.G.E. 1976. 'The inception of the Iron Age in temperate Europe'. Proceedings of the Prehistoric Society 42, 1-14.

Powell-Cotton, Major P.H.G. and Crawford, O.G.S. 1924. 'The Birchington Hoard'. Antiquaries Journal IV, 220-227.

Powell-Cotton, Major P.H.G. and Pinfold, G.F. 1939. 'The Beck Find. Prehistoric and Roman site on the foreshore at Minnis Bay. Report and Catalogue'. Archaeologia Cantiana LI, 191ff.

Powlesland, D.J. 1988. 'Staple Howe in its landscape'. In: Manby, T.G. (ed.) 1988. Archaeology in Eastern Yorkshire. Essays in honour of T.C.M. Brewster, FSA. Sheffield, 101-107.

Prendergast, E. 1960. 'Group of Bronzes from Charlville Forest, County Offaly'. Journal of the Royal Society of Antiquaries of Ireland XC, 51-55.

Primas, M. 2002. 'Taking the High Ground: Continental Hill-Forts in Bronze Age Contexts'. Proceedings of the Prehistoric Society 68, 41-59.

Proudfoot, E.V.W. and Parker, A. 1977-78. 'A bronze socketed axe from Gauldry, NE Fife'. Proceedings of the Society of Antiquaries of Scotland 109, 366-368.

Pryor, F. 1980. Will it all come out in the Wash? Reflections at the end of eight years digging.' In Barrett, J. and Bradley, R. (eds.): *Settlement and Society in the British Later Bronze Age* 483-500. British Archaeological Reports (BAR British Series 83).

Pryor, F. and Bamforth, M. (eds.) 2010. Flag Fen, Peterborough: Excavation and Research 1995-2007. Oxford: Oxbow.

Pye, D. 1968. The nature and art of workmanship. Cambridge: Cambridge University Press.

Quinnell, H. 1988. 'The Local Character of the Devon Bronze Age and its Interpretation in the 1980s'. Proceedings of the Devon Archaeological Society 46, 1-13.

Radley, J. 1971. 'New Bronze Age spear-heads from Yorkshire and a provisional list of Yorkshire spear-heads'. The Yorkshire Archaeological Journal XLII, 14-19.

Raftery, B. 1972. 'Iron Age and Irish Sea: Problems for Research'. In: Thomas, C. 1972. The Iron Age in the Irish Sea Province. Papers given at a CBA conference held at Cardiff, January, 3th to 5th, 1969. London, 1-10.

Raftery, B. 1976. 'Dowris, Hallstatt and La Tène in Ireland: problems of the transition from bronze to iron.' In: de Laet, S.J. (ed.) 1976. Acculturation ad continuity in Atlantic Europe, 189-97.

Rahtz, P. 1956-7. 'Kings Weston Down Camp, Bristol, 1956'. Proceedings of the Spelaeological Society 1956-57, 30-39.

Rainbow, H.N. 1928. 'Socketed and looped iron axes from the British Isles'. Archaeological Journal 85, 170-175.

Rainstrick, A. 1929. 'The Bronze Age in West Yorkshire'. The Yorkshire Archaeological Journal XXIX, 354-366.

Ramsay, G.R.W. 1856. 'Two bronze socketed celts…'. Archaeological Journal XVII, 412.

Read, C.H. 1907. 'Notes – Exhibition of the Harlyn Bay brooches', Antiquaries Journal XXI, 372-374.

Read, C.H. and Smith, R.A. 1916. 'On a collection of Antiquities from the Early Iron Age Cemetery of Hallstatt, presented to the British Museum by Lord Avebury, 1916'. Archaeologia XVII, 145-162.

Reboul, R. *et al.* 1975. Inventaria Archaeologia France, Dépot de l'age du Bronze Final en Lorraine et en Sarre, Fasc. 4, F29-F49. St Germain-en-Lage.

Rees, H. *et al*. 1993. 'Later Bronze Age and Early Iron Age settlement in the Lower Test Valley'. Proceedings of the Hampshire Field Club and Archaeological Society 49, 19-46.

Reinecke, P. 1911. 'Grabfunde vom Ende der reinen Bronzezeit'. Alterthümer unserer heidnischen Vorväter (AuhV) V.

Renfrew, A. C. 1985. The Archaeology of Cult: The Sanctuary of Phylakopi. London: British School of Archaeology at Athens.

Richards, C. and Thomas, J. 1984. 'Ritual activity and structural deposition in later Neolithic Wessex'. In: Bradley, R. and Gardiner, J. 1984. Neolithic Studies: A review of some recent work. Oxford: British Archaeological Reports (British Series 133)

Richardson, C. 1999. 'A catalogue of recent acquisitions to Tullie House Museum and reported finds from the Cumbrian area 1990-1996. Part II: Reported finds'. Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society XCIX, 1-53.

Richardson, K.M. and Young, A. 1951. 'An Iron Age A site on the Chilterns'. Antiquaries Journal XXXI, 132-149.

Ridgeway, W. and Smith, R.A. 1905. 'The origin and evolution of the brooch…'. Antiquaries Journal XXI, 97-117.

Rieth, A. 1942. Die Eisentechnik der Hallstattzeit.Leipzig

Ritchie, A. and Ritchie, J.N.G. 1972. Regional Archaeologies: Edinburgh and South East Scotland. London.

Ritchie, G. and Ritchie, A. 1981. Scotland – Archaeology and Early History. London.

Rivet, A.L.F. 1966. The Iron Age in Northern Britain. Edinburgh.

Roberts B. and Ottaway B. 2003. ‚The Use and Significance of Socketed Axes During the Late Bronze Age'. European Journal of Archaeology, Vol. 6, No. 2, 119-140.

Roberts, B., Uckelmann, M. and Leedham, J. 2011. Treasure Report for 2011T110 (KENT-CD6A33): Early Iron Age metalwork hoard from Stockbury, Kent. http://finds.org.uk/database/artefacts/record/id/431351

Roberts, B.W., Boughton, D., Dinwiddy, M., Doshi, N., Fitzpatrick, A.P., Hook, D., Meeks, N., Mongiatti, A., Woodward, A. and Woodward, P.2001. 'Collapsing Commodities or Lavish Offerings? Understanding large-scale metalwork deposition at Langton Matravers, Dorset'. Oxford Journal of Archaeology Vol. 34 (4).

Robertson-MacKay, R. 1977. 'The defences of the Iron Age Hill-Fort at Winklebury, Basingstoke, Hampshire'. Proceedings of the Prehistoric Society 43, 131-154.

Robinson, P. 1995. 'Miniature Socketed Bronze Axes from Wiltshire'. Wiltshire Archaeological and Natural History Magazine 88, 60-68.

Roche, H., Grogan, E., Bradley, J., Coles, J. and Raftery, B. (eds.) 2004. From Megaliths to Metals. Essays in Honour of George Eogan. Oxford: Oxbow.

Roes, A. 1960. 'Horn Cheek-Pieces'. Antiquaries Journal XL, 68-72.

Rohl, B.M. and Needham, S. 1998. The Circulation of Metal in the British Bronze Age: the Application of Lead Isotope Analysis. London: British Museum Occasional Paper 102.

Roots, W. 1853. 'Notes – Socketed Axe from the Thames'. Antiquaries Journal II, 101.

Roth, H. 1974. 'Ein Ledermesser der atlantischen Bronzezeit aus Mittelfranken'. Archäologisches Korrespondenzblatt 4, 37-47.

Rovira, M.C. 2001. 'Les députs de l'utilisation et de la production du fer en Méditerranée occidentale.' Mediterranean Archaeology 14, 147-62.

Row, P. 1930. 'A Founder's Hoard of Prehistoric Bronze Implements from Coulson'. Surrey Archaeological Collections, Vol. XXXVIII, 75-79.

Rowlands, M. 1976. 'The archaeological interpretation of prehistoric metalworking'. World Archaeology 3, 210-224.

Rowlands, M.J. 1980. 'Kinship, alliance and exchange in the European Bronze Age.' In: Barrett, J. and Bradley, R. 1980. Settlement and Society in the British Later Bronze Age. BAR 83, 15-55. Oxford.

Rowlands, M. 1984. 'Conceptualising the European Bronze and Early Iron Age'. In: Bintliff, J. (ed.) 1984. European Social Evolution: archaeological perspectives. Bradford: University of Bradford, 147-156.

Rowlands, M. 2007. 'The politics of identity in archaeology'. In: Insoll, T. (ed.) 2007. The Archaeology of Identities. Routledge: London and New York, 59-71.

Roymans, N. and Fokkens, H. 1995. 'Bronzezeitliche und Früheisenzeitliche Siedlungen in den Niederlanden – eine Übersicht'. In: zu Erbach, M. *et al.* 1995. Die Urnenfelderzeit nördlich und südlich der Alpen. Ergebnisse eines Kolloquiums. Bonn, 91-108.

Rudling, D. 1987. 'The Excavation of a Late Bronze Age Site at Yapton, West Sussex, 1984'. Sussex Archaeological Collections 125, 51-69.

Rychner, V. 1995. ‚Stand und Aufgaben Dendrochronologischer Forschung zur Urnenfelderzeit'. In: zu Erbach, M. *et al.* 1995. Die Urnenfelderzeit

nördlich und südlich der Alpen. Ergebnisse eines Kolloquiums. Bonn, 455-487.

Salter, C. and Ehrenreich, R. 1984. ‚Iron Age metallurgy in Central Southern Britain'. In: Cunliffe, B. and Miles, D. (eds.) 1984: Aspects of the Iron Age in Central Southern Britain: Oxford University Committee for Archaeology, Monograph 2, 146-161.

Sandars, N.K. 1971. 'From Bronze to Iron Age: a sequel to a sequel'. In: Boardman, J., Brown, M.A., and Powell, T.G.E. (eds.) 1971. The European Community in Later Prehistory. London, 3-29.

Saunders, C. 1971. ‚The Pre-Belgic Iron Age in the Central and Western Chilterns'. Arch. Journal CXXVIII, 1-30.

Saunders, C. 1982. 'A Hallstatt C bronze razor from St Alban's, Hertfordshire'. Hertfordshire Archaeology, 8, 201-202.

Savory, H.N. 1937. 'An Early Iron Age Site at Long Wittenham, Berks.' Oxoniensa II, 1-12.

Savory, H.N. 1939. 'Early Iron Age'. Victoria County History Oxford, Vol. I, 251-267.

Savory, H.N. 1946-47. 'Hoard of Breton Socketed Axes from Tintern, Monmouthshire'. Archaeologia Cambrensis 99, 114-115.

Savory, H.N. 1948. 'The 'Sword-Bearers.' A Reinterpretation'. Proceedings of the Prehistoric Society XIV, 155ff.

Savory, H.N. 1958a. 'Excavations at Dinorben Hill-Fort, Abergele (Denb.)'. Bulletin of the Board of Celtic Studies XVII, 296-309.

Savory, H.N. 1958b. 'The Late Bronze Age in Wales. Some new discoveries and new interpretations'. Archaeologia Cambrensis 107, 3-64.

Savory, H.N. 1968. Spain and Portugal. London.

Savory, H.N. 1971. Excavations at Dinorben, 1965-9. Cardiff.

Savory, H.N. 1972a. 'A Late Bronze Age Hoard from Princetown (Mon.)'. Bulletin of the Board of Celtic Studies XXV (part 1), 92-97.

Savory, H.N. 1972b. 'A Find of a Bronze Socketed Gouge in Montgomeryshire'. Bulletin of the Board of Celtic Studies XXV (part 2), 97-99.

Savory, H.N. 1976. Guide Catalogue of the Early Iron Age Collection (National Museum of Wales). Cardiff.

Savory, H.N. 1980. Guide Catalogue of the Bronze Age Collection (National Museum of Wales). Cardiff.

Schauer, P. 1971. 'Die Schwerter in Süddeutschland, Österreich und der Schweiz I. Prähistorische Bronzefunde Abteilung IV, Band 2. München.

Schauer, P. 1972a. 'Westeuropäische Bronzen aus der Späten Urnenfelderzeit in Südwestdeutschland'. Archäologisches Korrespondenzblatt 2, 103-114.

Schauer, P. 1972b. 'Zur Herkunft der Bronzenen Hallstatt-Schwerter'. Archäologisches Korrenspondenzblatt 2, 261-270.

Schiffer, M.B. 1972. 'Archaeological Context and Systemic Context'. American Antiquity 37, 156-165.

Schmidt, P.K. and Burgess, C. 1981. 'The axes of Scotland and Northern England'. Prähistorische Bronzefunde, Abteilung IX, 7. Band. München: C.H. Beck.

Schumacher, F. J. 1989. ‚Das frührömische Grab 978 mit Beil und Axt. Waffen oder Werkzeuge?' In: A.Hafner (Hrsg.): Gräber – Spiegel des Lebens. Zum Totenbrauchtum der Kelten und Römer am Beispiel des Treverer-Gräberfeldes Wederath-Belginum. Mainz, 247-254

Scott, E. 1997. 'Introduction: On the Completeness of the Archaeological Narratives'. In: Moore, J. and Scott, E. (eds.) 1997. Invisible People and Processes. London: Leicester University Press, 1-12.

Scott, J.G. 1966. Regional Archaeologies: South West Scotland. London.

Scurfield, C.J. 1997. 'Bronze Age Metalwork from the River Trent in Nottinghamshire'. Transactions of the Thoroton Society of Nottinghamshire 101, 17-29.

Seager Thomas, M. 2001. 'Two Early First Millennium BC Wells at Selsey, West Sussex and their wider Significance'. Antiquaries Journal 81, 15ff.

Sealey, P.R. 1987. 'A Late Bronze Age hoard from Fingringhoe'. Essex Archaeology and History 18, 7-15.

Sealey, P.R. 1991. 'Some finds of the Bronze and Iron Ages in Essex'. Essex Archaeology and History 22, 1-12.

Sealey, P.R. 1997. 'A Late Bronze Age hoard from Layer Marney'. Essex Archaeology and History 28, 273-277.

Shanks, M. 1998 'The life of an artefact in an interpretative archaeology'. Fennoscandia Archaeologia 15, 15-42.

Shanks, M. and Hodder, I. 1997. 'Processual, postprocessual and interpretive archaeologies'. In: Hodder, I., Shanks, M., Alexandri, A., Buchli, V., Carman, J., Last, J. and Lucas, G. (eds.) 1997. Interpreting archaeology: finding meaning in the past. London and New York: Routledge, 3-29.

Shanks, M. and Tilley, C. 2007. 'Ideology, Symbolic Power and Ritual Communication – A Reinterpretation of Neolithic mortuary practices'. In: Hodder, I. (ed.) 2007. Symbolic and Structural Archaeology. Cambridge: Cambridge University Press, 129-154.

Sharples, N. 2010. Social relations in later Prehistory. Wessex in the 1st millennium BC. Oxford.

Shepherd, I. A. G. 2001. ,The use of Bronze in frontier locations: some new late Bronze Age objects from upper Deeside, Aberdeenshire.' In: Metz, W. H., Beek, B. L. and Steegstra, H. (eds.) 2001. Patina : essays presented to Jay Jordan Butler on the occasion of his 80th birthday, 491-501.

Sheppard, T. 1941. 'The Parc-y-Meirch Hoard, St George parish, Denbighshire'. Archaeologia Cambrensis XCVI (part 1), 1-11.

Sherry, J.F. 1983. ‚Gift Giving in Antrhopological Perspective'. The Journal of Consumer Research Vol 10 (2), 157-168.

Sievers, S. 1982. Die mitteleuropäischen Hallstattdolche. München.

Sills. D.L. (ed) 1968. International encyclopaedia of the social sciences. New York: Macmillan and Free Press.

Smallcombe, W.A. and Collins, A.E.P. 1946. 'The Late George W.Smith of Reading'. The Berkshire Archaeological Journal 49, 62-67.

Smedley, N. *et al.* 1961. 'Archaeology in Suffolk'. Proceedings of the Suffolk Institute of Archaeology XXVIII, 290ff.

Smedley, N. and Owles, E. 1970. 'Archaeology in Suffolk 1968'. Proceedings of the Suffolk Institute of Archaeology XXXI, 188-201.

Smith, C.N.S. 1957. 'Catalogue of Prehistoric Finds from Worcestershire'. Transactions of the Worcestershire Archaeological Society XXXIV (New Series), 1-28.

Smith, G.H. 1987. 'A Beaker (?) Burial Monument and a Late Bronze Age assemblage from East Northdown, Margate'. Archaeologia Cantiana CIV, 237-291.

Smith, M.A. (ed.) 1957. Inventaria Archaeologia GB, 4th set, GB19-24. London.

Smith, M.A. (ed.) 1958. Inventaria Archaeologia GB, Late Bronze Age hoards in the British Museum, 6th set, GB35-41. London.

Smith, M.A. 1959. 'Some Somerset hoards and their place in the Bronze Age of Southern Britain'. Proceedings of the Prehistoric Society XXV, 144-187.

Smith, R.A. 1905. 'Evolution of late-Keltic pins'. Antiquaries Journal XX, 344ff.

Smith, R.A. 1908. 'The Weybridge Bucket and Prehistoric Trade with Italy'. Surrey Archaeological Collections XXI, 165-170.

Snodgrass, A. 1980. ' Iron and Early Metallurgy in the Mediterranean'. In: Wertime, T. A. and Muhly, J. D. (eds.) 1980. The Coming of the Age of Iron. New Haven-London: Yale University Press, 335-374.

Sommerfeld, C. 1994. Gerätegeld Sichel. Berlin.

Spindler, K. 1975. 'Grabfunde der Hallstattzeit vom Magdalenenberg bei Villingen im Schwarzwald'. Ausgrabungen in Deutschland 1, 221-242.

Sprater, F. 1939. 'Ein Hortfund der Hallstattzeit vom Forthaus Schorleburg bei Alsenborn (Pfalz).' Germania 23, 158-163.

Spratling, M.G. 1971. 'Further comments on the Iron Age cauldron from Elvanfoot, Lanarkshire'. Glasgow Archaeological Journal 2, 111-112.

Sprockhoff, E. 1937. 'Jungbronzezeitliche Hortfunde Norddeutschlands. Periode IV'. Kataloge des Römisch-Germanischen Zentralmuseums zu Mainz 12. Mainz.

Sprockhoff, E. 1956. ‚Jungbronzezeitliche Hortfunde der Südzone des Nordischen Kreises (Periode V)'. Römisch-Germanisches Zentralmuseum zu Mainz. Katalog 16. Mainz.

Spurgeon, C.J. 1972. 'Enclosures of Iron Age Type in the Upper Severn Basin'. In: Chitty, L.F., Lynch, F. and Burgess, C. (eds.) 1972. Prehistoric man in Wales and the West: essays in honour of Lily Frances Chitty. Bath, 321-344.

Spyer, P. (ed.) 1998. Border Fetishisms: Material Objects in Unstable Places. New York: Routledge.

Stanford, S.C. 1972. 'Welsh border Hill-Forts'. In: Thomas, C. 1972. The Iron Age in the Irish Sea Province. Papers given at a CBA conference held at Cardiff, January, 3th to 5th, 1969. London, 25-36.

Stanton, Y.C. 1984. 'The Hoard of South Wales or 'Stogursey' Axes from St Mellons, South Glamorgan: A Preliminary Statement'. Bulletin of the Board of Celtic Studies XXXI, 191-196.

Stead, I.M. 1991. Iron Age cemeteries in East Yorkshire. London.

Stead, I.M. 1998. The Salisbury Hoard. Stroud.

Stewart, M.E.C. 1985. 'The excavation of a henge, stone circles and metal working at Moncreiffe, Perthshire'. Proceedings of the Society of Antiquaries of Scotland 115, 125-150.

Stig-Sørensen, M.L. 1986. 'Material kultur of kulturel forandring'. Varia 12, 133-142.

Stig-Sørensen, M.L. 1987. 'Material order and cultural classification: the role of bronze objects in the transition from Bronze Age to Iron Age in Scandinavia.' In Hodder, I. (ed.) 1987. The archaeology of contextual meanings, 90-101.

Stig-Sørensen, M.L. and Thomas, R. (eds.) 1989. The Bronze-Iron Age transition in Europe: aspects of continuity and change in European societies, c. 1200-500BC. Oxford.

Stig-Sørensen, M.L. 1989. 'Period VI reconsidered: Continuity and Change at the Transition from Bronze to Iron Age in Scandinavia.' In: Stig-Sørensen, M.L. and Thomas, R. (eds.) 1989. The Bronze-Iron Age transition in Europe: aspects of continuity and change in European societies, c. 1200-500BC. Oxford, 457-492.

Stjernquist, B. 1967. 'Ciste a Cordoni (Rippenzisten): Produktion-Funktion-Diffusion.' Acta Archaeologica Lundensia, Series 4, 5 Lund/Bonn.

Stone, J.F.S. 1937. 'A Late Bronze Age Habitation Site on Thorny Down, Winterbourne Gunner, S. Wilts.'. Wiltshire Archaeological and Natural History Magazine LXVI, 640-660

Strathern, M. 1988: The Gender of the Gift. Berkeley: University of California Press.

Sulimirski T. 1954: 'Scythian antiquities in Western Asia'. Artibus Asiae, XVII, 282-318.

Sundwall, J. 1943. Die älteren italienischen Fibeln. Berlin.

Tackenberg, K. 1971. 'Die jüngere Bronzezeit in Norddeutschland. Teil I. Die Bronzen'. Veröffentlichungen der urgeschichtlichen Sammlungen des Landesmuseums zu Hannover 19. Hildenheim.

Taylor, A. 1985. ‚Prehistoric, Roman, Saxon and Medieval artefacts from the Southern Fen Edge, Cambridgeshire', Proceedings of the Cambridge Antiquarian Society LXXIV, 1-53.

Taylor, M. 1979. 'A survey of prehistoric sites north of Cambridge', Proceedings of the Cambridge Antiquarian Society LXIX, 21-37.

Tester, P.J. 1957. 'The Bexley Heath Bronze Age Hoard'. Archaeologia Cantiana LXXI, 232-233.

Thrane, H. 1975. 'Europaeiske forbindelser'. Nationalmuseets Skrifter, Arkaeologisk-historisk raekke 16. København.

Thomas, C. 1972. 'The Iron Age in the Irish Sea Province'. Papers given at a CBA conference held at Cardiff, January, 3th to 5th, 1969. London.

Thomas, J. 1996. Time, Culture and Identity: An Interpretative Archaeology. London and New York: Routledge

Thomas, J. 2004. Archaeology and Modernity. London: Routledge.

Thomas, R. 1983. 'An Armorican Socketed Axe from Hollingbury Hill'. Sussex. Archaeological Collections 121, 198-199.

Thomas, R. 1984. 'Bronze Age Metalwork from the Thames at Wallingford'. Oxoniensa XLIX, 9-19.

Thomas, R. *et al.* 1986. 'A Late Bronze Age Riverside Settlement at Wallingford, Oxfordshire'. Archaeological Journal 143, 174-200.

Thomas, R. 1989. 'The Bronze-Iron transition in Southern England.' In: Stig-Sørensen, M.L. and Thomas, R. (eds.) 1989. The Bronze-Iron Age transition in Europe: aspects of continuity and change in European societies, c. 1200-500BC. Oxford, 263-286.

Thomas, R. 1998. 'When land first became private property'. British Archaeology May 1998, 8-9.

Thomsen, C.J. 1836. Ledetråd til Nordisk Oldkyndighed. Køpenhaven.

Tilley, C. 1989. 'Interpreting material culture'. In: Hodder, I. (ed.) 1989. The Meaning of Things: Material Culture and Symbolic Expression. Abingdon: Routledge, 185-194.

Tischler, O. 1881. 'Über die Formen der Gewandnadeln (Fibeln) nach ihrer historischen Bedeutung.' In: Beiträge zur Anthropologie und Urgeschichte Bayerns. München.

Todorović, J. 1972. Praistorijska Karaburma. Beograd.

Tomlinson, A. 1986. 'A Group of Objects from Castle Rings Fort'. Wiltshire Archaeological and Natural History Magazine 80, 210-215.

Toms, H.S. 1907. 'A late Celtic bronze pin and a figure of a boar, found at Woodendean, Sussex'. Antiquaries Journal XXI, 489-490.

Torbügge, W. 1970/71. 'Vor- und frühgeschichtliche Flußfunde.' Berichte der Römisch-Germanischen Kommission 51-52, 1-146.

Tratman, E.K. 1922-23. 'First Report on King's Weston Hill, Bristol'. Proceedings of the Spelaeological Society 1 (2), 76-83.

Tratman, E.K. 1925. 'Second Report on King's Weston Hill, Bristol'. Proceedings of the Spelaeological Society 3 (2), 238-244.

Tratman, E.K. 1944-46. 'Prehistoric Bristol'. Proceedings of the Spelaeological Society 3 (5), 162-183.

Turnbull, A. 1981. 'Bronze Age and Hallstatt Finds from Rangebourne, Potterne'. Wiltshire Archaeological and National History Society Magazine 77, 45-48.

Turnbull, A. 1984. From Bronze to Iron – the occurrence of Iron in the British Later Bronze Age. Edinburgh (unpublished D.Phil.)

Turner, L. 2010. A Re-Interpretation of the Later Bronze Age Metalwork Hoards of Essex and Kent. Oxford: British Archaeological Reports (BAR British Series) 507.

Trustees of the British Museum 1953. Later Prehistoric Antiquities of the British Isles. London.

Tylor, M.B. 1977. Primitive Culture: Researches into the Development of mythology, Philosophy, Religion, Language, Art and Custom, vol 1. New York: Gordon Press.

UCL Field Archaeology Report 1996-97. Major Bronze Age discoveries on the Willingdon Levels. UCL Field Archaeology Unit, London.

Van den Broeke, P. W. 2001. ,The inconspicuous continuation of bronze deposition in Dutch wet contexts after the Early Iron Age.' In: Metz, W. H., Beek, B. L. and Steegstra, H. (eds.) 2001. Patina : essays presented to Jay Jordan Butler on the occasion of his 80th birthday, 161-168.

Verron, G. 1976. 'Les civilisations de l'Age du Bronze en Normandie'. In: Guilaine, J. 1976. La préhistoire Française. 2: Les Civilisations Néolithiques et Protohistoires. Paris, 585-600.

Vine, P.M. 1982. The Neolithic and Bronze Age Cultures of the Middle Upper Trent Basin. Oxford: British Archaeological Reports (British Series) 105.

Wagner, R. 1986. Symbols that stand for themselves. Chicago.

Wainwright, G. 1979. Gussage All Saints. An Iron Age Settlement in Dorset. DoE Archaeological Reports No. 10. London.

Walker, I.C. 1971-2. 'The counties of Nairnshire, Moray and Banffshire in the bronze Age, Part II'. Proceedings of the Society of Antiquaries of Scotland 104, 71-120.

Walker, L. 1984. 'Population and behaviour.' In: Cunliffe, B. 1984. Danebury: an iron Age hillfort in Hampshire. Volume II The excavations, 1969-78: the finds. Council for British Archaeology, 442-474.

Wamser, G. 1975. ‚Die Hallstattkultur in Ostfrankreich'. Berichte der Römisch-Germanischen Kommission 56, 1-178.

Ward-Perkins, J.B. 1938. 'An Early Iron Age Site at Crayford, Kent'. Proceedings of the Prehistoric Society (New Series) IV, 151-168.

Warmenbol, E. 1985. 'A propos de deux fragments de haches a douille découvertes au Trou del Leuve a Sinsin (Namur)'. Amphora 42, 1-12.

Warmenbol, E. 1987. 'Deux dépôts de haches à douille découverts en Province d'Antwerpen – La diffusion de la culture du Plainseau en Belgique'. In: Blanchet, J.-Cl. *et al.* (eds.) 1987, 133-151.

Warmenbol 1988a. 'Le groupe Rhin-Suisse-France orientale and les grottes sépulchrales du Bronze Final en Haute-Belgique'. In: Brun, P. and Mordant, C. (eds.) Les Groupe Rhin-Suisse-France orientale et la notion de civilisation des champs d'urnes. Nemours: Mémoires du Musée Préhistorique d'Ile-de-France, 153-163.

Warmenbol, E. 1988b. 'Broken Bronzes and Burned Bones – the transition from Bronze to Iron Age in the Low Countries'. Helinium XXVIII/2, 244-270.

Warmenbol, E. 1989. 'De l'âge du Bronze à l'âge du Fer en Belgique et dans le sud des Pays-Bas'. In: Otte, M. and Ulrix-Closset, M. 1989. Le civilisation Hallstatt. Rencontre Internationale. Liège, 133-140.

Warmenbol, E. 1991. 'Le Bronze Final Atlantique entre Côte et Escaut'. Chevillot, C. and Coffyn, A. (eds.) 1991. L'âge du Bronze Atlantique. Beynac-et-Cazenac, 89-110.

Warmenbol, E. 1993. 'Les Nécropoles à tombelles de Gedinne et Louette-Saint-Pierre (Namur) et le groupe «Mosan» des nécropoles à épées Hallstattiennes'. Archaeologia Mosellana 2, 83-114.

Warmenbol, E. 1996. 'L'or, la mort et les Hyperboréens. La Bouche des Enfers ou le Trou de Han à Han-sur-Lesse. In: Almagro-Gorbea, M. et al (ed.) 1996. Archäologische Forschungen zum Kultgeschehen in der

jüngeren Bronzezeit und frühen Eisenzeit Alteuropas. Ergebnisse eines Kolloquiums in Regensburg 4.-7. Oktober 1993, Regensburg, 203-235.

Warmenbol, E. 1999. 'La lance et l'au-delà. Une belle pièce de Han-sur-Lesse'. Lunula. Archaeologica Protohistorica VII, 35-37.

Warmenbol, E. 2000. 'Passes d'armes – Les objets de l'âge du Bronze dragués dans L'Escaut'. In :Bonnamour, L. (ed.) 2000. Archéologie des fleuves et des rivières. Paris, 103-106.

Warmenbol, E. 2001. 'L'âge du Bronze au Trou de Han (Namur, Belgique) : Des dépôts entre occidents et orient'. In: Préhistoire de la Grande Plaine du Nord de l'Europe, Actes du Colloque Chaire Francqui interuniversitaire au titre étranger (Université de Liège, 26 juin 2001). Liège, 225-238.

Watson, P.J. 1993-4. 'Some middle and Late Bronze Age axes from South Staffordshire and the West Midlands'. Transactions of the Birmingham and Warwickshire Archaeological Society 93, 1-9.

Watson, P. 1999. 'Broom, Area E: Bronze cauldrons'. In: Palmer, C. *et al.* 1999. 'Archaeological Excavations in the Arrow Valley, Warwickshire'. Transactions of the Birmingham and Warwickshire Archaeological Society 103, 43-50.

Way, A. 1869 'Antiquities of Bronze found in Devonshire'. Archaeological Journal XXVI, 339-352.

Weiner, A. 1992. Inalienable possessions: The paradox of Keeping-while-Giving. University of California Press.

Welbourn, D.A. 1985. 'Craft specialisation and complex societies: a critique'. In Champion, T.C. and Megaw, J.V.S. (eds.) 1985. Settlement and Society: aspects of West European prehistory in the first millennium B.C. Leicester, 123–32.

Wells, C.E. *et al.* 2001. 'A Late Bronze Age Human Skull and Associated Worked Wood from a Lancashire Wetland'. Proceedings of the Prehistoric Society 67, 163-174.

Wells, P.S. 1980. Culture Contact and Culture Change: Early Iron Age Central Europe and the Mediterranean World. Cambridge.

Wells, P. S. 1984. Farms, Villages, and Cities. Commerce and Urban Origins in Late Prehistoric Europe. London.

Wells, P. 1989. 'Intensification, Entrepreneurship, and cognitive change in the Bronze-Iron Age transition.' In: Stig-Sørensen, M.L. and Thomas, R. (eds.) 1989. The Bronze-Iron Age transition in Europe: aspects of continuity and change in European societies, c. 1200-500BC. Oxford, 173-183.

Wertime, T. A. and Muhly, J. D. (eds.) 1980. The Coming of the Age of Iron. New Haven-London: Yale University Press.

Wheeler, M. 1953. 'An Early Iron Age 'beach-head' at Lulworth, Dorset'. Antiquaries Journal XXXIII, 1-14.

Wheeler, R.E.M. 1929. ''Old England', Brentford'. Antiquity III, 20-33.

Whimster, R. 1977. 'Harlyn Bay Reconsidered: the Excavations of 1900-1905 in the Light of Recent Work'. Cornish Archaeology 16, 61-88.

Wierzbicka, A. 1990. 'The meaning of colour terms: semantics, culture and cognition'. Cognitive Linguistics 1 (1), 99-150.

Wiessner, P. 1989. 'Style and changing relations between the individual and society'. In: Hodder, I. (ed.) 1989. The Meaning of Things: Material Culture and Symbolic Expression. Abingdon: Routledge, 56-63.

Wilson, C.M. 1971. 'Archaeological Notes'. Lincolnshire History and Archaeology 6, 3-19.

Wilson, D. 1863. Prehistoric Annals of Scotland. London[2].

Wiltshire Archaeological Register for 1971. 'Bronze Age – no. 71/52 (Figheldean Down)'. Wiltshire Archaeological and Natural History Society 67, 167-178.

Wiltshire Archaeological Register for 1972. 'Bronze Age – no. 72/32 (Melksham)'. Wiltshire Archaeological and Natural History Magazine 68, 126-139.

Wiltshire Archaeological Register for 1981. 'Bronze Age – nos. 18 (Melksham) and 20 (Potterne)'. Wiltshire Archaeological and Natural History Magazine 77, 157-163.

Woodcock, A. 1995. 'A Late Bronze Age waterlogged site at Shinewater Park near Eastbourne in East Sussex, England'. NewsWARP (News of the Wetlands Archaeology Research Project) 18, 7-9.

Woodward, P.J. 1987. 'The excavation of an Iron Age and Romano-British settlement at Rope Lake Hole, Corfe Castle, Dorset'. In: Sunter, N. and Woodward, P.J. 1987. Romano-British Industries in Purbeck, excavations at Norden by Nigel Sunter; excavation at Ower and Rope Lake Hole by Peter J Woodward. Dorchester, 125-80.

Worsfold, F.H. 1943. 'A Report on the Late Bronze Age Site excavated at Minnis Bay, Birchington, Kent, 1938-40'. Proceedings of the Prehistoric Society (New Series) 9, 28-48.

Wymer, J.J. 1986. ‘Early Iron Age pottery and a triangular loom weight from Redgate Hill, Hunstanton’. Norfolk Archaeology XXXIX, 286-294.

Yates, D.T. 1999. ‘Bronze Age field systems in the Thames Valley’ Oxford Journal of Archaeology 18 (2), 157-170.

Yates, D.Y. 2007. Land, Power and Prestige: Bronze Age field systems in Southern England. Oxford: Oxbow Books.

Yates, D.T. and Bradley, R. 2010. ‘The siting of metalwork hoards in the Bronze Age of South-East England.’ The Antiquaries Journal 90, 1-32.

Yates, G.C. 1896. ‘Bronze Implements of Lancashire and Cheshire’. Transactions of the Lancashire and Cheshire Antiquarian Society XIII, 124-142.

York, J. 2002. ‘The Life Circle of Bronze Age metalwork from the Thames’. Oxford Journal of Archaeology 21 (1), 77-92.

Zimmermann, W. 1970. ‘Urgeschichtliche Opferfunde aus Flüssen, Mooren, Quellen und Brunnen Südwestdeutschlands’. Neue Ausgrabungen und Forschungen in Niedersachsen 6, 53-92.

Zürn, H. 1942. ‘Zur Chronologie der späten Hallstattzeit’. Germania 26, 116-124.

Zürn, H. 1952. ‚Zum Übergang von Späthallstatt zu La Tène A im südwestdeutschen Raum’. Germania 30, 38-45.

Zürn, H. 1970. ‚Hallstattforschungen in Nordwürttemberg’. Veröffentlichungen des Staatlichen Amtes für Denkmalpflege Stuttgart, Reihe A, 16. Stuttgart.

APPENDIX A

Catalogue

A Note on the Catalogue

Because of the importance of exact measurements for creating a valid typology for Early Iron Age socketed axes, each specimen was meticulously measured, weighed, photographed and, if time allowed, drawn. If not stated otherwise, the photographs and drawings in the catalogue are my own. They were all taken from the original objects or made by the author unless otherwise. It was not felt that a drawing of the section was necessary, but if there was sufficient time, a drawing of the view inside the socket of the axe from above was added, in most cases above the drawing of the face of the socketed axe.

All axes were also described in terms of state of preservation and surface texture of the axes, along with signs of secondary working such as trimming and sharpening or signs of damage, whether intentional or accidental. The surface of the axe is normally described using colours such as gold, brown or green which are meant to reflect the fact that various shades of a colour are usually found. The surface of a relatively small number of axes consists of a very smooth, shiny patina. In the majority of axes, however, this top layer or skin is damaged and remains in patches, flecks or it can be described as speckled or flecked. Sometimes it has been completely removed, either accidentally or intentionally, which is noted. Usually, the metal below this surface skin is rougher to the touch, and may be covered with innumerable small depressions or holes, a state which is described as porous or pitted. Some axes have undergone more or less successful chemical treatment to prevent further corrosion which was also noted. At the other end of the spectrum are relatively uncorroded specimens which in the catalogue are described as displaying smooth, untarnished surfaces. Most axes were trimmed after the initial casting and cooling process and this working of the axe is described in such terms as

trimming or removal of casting seams (or casting flashes) and hammering or shaping of the blade. Furthermore, a number of axes were smoothed and polished after the casting and the removal of the casting seams and note is made in cases where these processes have been carried out only partially or not at all. All evident casting flaws are mentioned and, if possible explained, for example when the mould was flawed or not enough bronze was used in the casting process. Many socketed axes have two opposed vertical mouldings or ribs inside the socket, here described as hafting ribs, although it is not entirely certain that this was indeed the function (Schmidt and Burgess 1981, 15). Sometimes there is only one of these ribs, rarely more than two, but generally these ribs are a rare occurrence in Sompting type or other Early Iron Age socketed axes and peculiarities of number or disposition, or their absence will not normally be noted in the catalogue.

The measurements are those of maximum length (LE) of the axe and maximum width (WI) of the cutting edge. The measurement of the mouths of the socketed axes is always both the width (WI (socket)) and the length (LE (socket)) and both the external (=socket, outer) *and* internal diameter (=socket, inner) are listed with, unless otherwise stated, the internal (=inner) length or width always given first.

If known, the registration or accession number of each individual axe was noted. This may be the museum's accession or registration number, the private collector's own identification number or else, the label excavators gave the axe during excavation or the Portable Antiquities Scheme's database number generated by the database. If known, any such number was given.

In a number of cases, however, no identification or registration number was published with the find and this will be indicated by the abbreviations 'no reg.' or 'unknown' which should be read as 'no registration number known'. This does not necessarily mean that the specimen has no registration number within its collection, may it be a private or a museum collection. The provenances given in the catalogue are as accurate as possible. If known, they will always include the name of the findspot (for example the farm name, road name or name of river/channel/lake) and/or the nearest village or town and the county. The socketed axes are listed alphabetically according to the county they were found

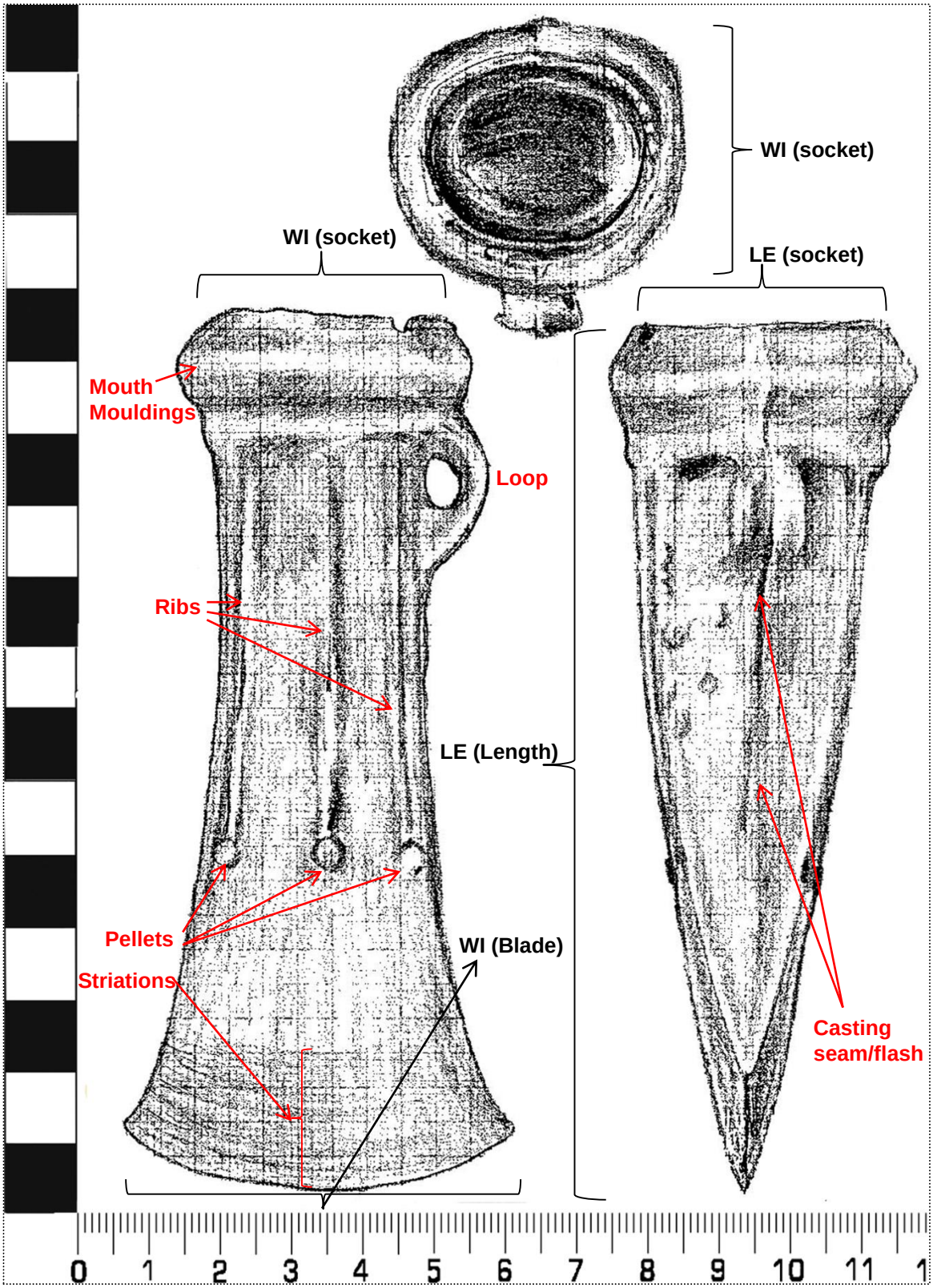
in, first the finds from England, then Scotland and lastly, from Wales. There is no separate list for hoard finds: to avoid confusion, hoards are included in the alphabetical catalogue and they also received a consecutive number or numbers, depending on how many socketed axes are part of the hoard.

A four-, six-, eight- and, in some cases of newer finds even ten- or twelve- figure grid references were added, if published, or, if unpublished or unknown, generated using Ordnance Survey's internet-based mapping site (getamap). Most of the available topographical details and find circumstances are included in the catalogue and it is stated, of course, whether the axe was found singly or in an association. Axes and groups without exact provenance or very doubtful provenance are listed in the last part of the catalogue under 'Unprovenanced' (nos. 1336-1353).

There is a short bibliography added to every entry, but even though the individual entries should include the most relevant bibliographical notes, it was not attempted to present an exhaustive bibliography for all listed finds.

The quality and quantity of information differs greatly for every axe. Certain information is inconsistent, for example weight, blade width or width/length of the socket or mouth moulding. Furthermore, the publications (spanning nearly 150 years) show that many different ways of measurement are possible. What is the width of the body: below or above the loop, at the mouth moulding or further down the body of the axe? These differences in measurement are not helpful and required each axe to be (re)visited to create a uniform system for their analysis.

Abbreviations: LE= Length; WI= Width; WE= Weight; HE= Height



Socketed axe of Sompting type, Cardiff II variant from 'Scotland' (no. 1339) demonstrating socketed axe terminology used throughout this thesis

England

Bedfordshire

Hoards:

1.-51. Manor ('Mr Goosey's) Farm, Wymington, Bedfordshire (SP963637)

- **Axe Hoard**
- **Type:** Transitional (not mapped)
- **Description:** Hoard of 50+ bronze axes, of which 31 are extant and 19 are known from casts.
- **Note:** The axes are of Late Bronze Age or transitional character, but the hoard context resembles Early Iron Age hoards in that the hoard contained only socketed axes.
- **References:** Kennett 1975, 5-7.
- **Oxford:** Ashmolean Museum (2 axes), **Northampton** (2 axes), **Bedford:** Bedford Museum (8 axes), **Luton:** Luton Museum (19 casts and 19 original axes (?)) – the remainders are either lost or in an unknown location.

Single finds:

52. Dunstable, Bedfordshire (centred on parish: TL003217)

- **Copper alloy socketed axe**
- **Type:** linear-decorated
- **LE:** 94.95cm
- **WI:** 46.21cm
- **WE:** 32.54g
- **Description:** "Decorated socketed axe, with single loop, corrosion hole next to junction between handle and body, and on body approx. ½ cm below the collar, which is quite crude. Flange deeper opposite handle, where body has decorated facets, narrow wasted almost square in mid-section." (R. Harte, www.finds.org.uk)
- **References:** www.finds.org.uk: NARC579
- **Returned to finder.**
- **Plate 1**

Berkshire

Single finds:

53. Wargrave, Berkshire

- **Copper alloy socketed axe**
- **Type:** Transitional
- **Description:** With its circular mouth and 5 facets on each face, the axe incorporates both 'Meldreth' and 'linear-decorated' axe features. The facets' edges are embellished with ribs and the collar is narrow.
- **References:** Smallcombe and Collins 1946, 62-67, Plate IV, fig. D.
- **George W. Smith Collection**

Bristol (Avon)

Hoards:

54.-73. Kings Weston Down, Lawrence Weston, Bristol (ST553780)

- **Fragmented Hoard**
- **Type:** Transitional
- **Description:** 2 rib-and-pellet decorated axes, 16 socketed axe fragments, 2 socket fragments, 3 casting jets (?), 1 socketed sickle fragment, 1 copper alloy sheet fragment, 1 unclassified cast copper alloy fragment, 1 cauldron rim fragment and an uncertain number of very small fragments of casting waste.

54. Socketed copper alloy axe, complete

- **Copper alloy socketed axe**
- **Type:** Transitional
- **LE:** 9,4cm
- **WI (cutting edge):** 4,9cm
- **WI (socket, inner-outer):** 2,5-3,7cm
- **LE (socket, back-front, inner-outer):** 2,4-3,3cm
- **WE:** 233,72g
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration: three ribs (ca. 4,5cm and diverging on one face; 4,3cm and almost parallel on the other face) ending in pellets. The axe has a double mouth moulding with a thicker upper and thinner lower mouth moulding. The socket is aligned with the cutting edge and the sides almost parallel down to the cutting edge which has been hammered into a splayed form. The axe has been used and re-sharpened (there are clear re-sharpening marks running parallel to the curve of the cutting edge).
- **Museum Accession Number: 31/1982/1** (Metal sampled by drilling 24/2/00 (Peter Northover))
- **Plate 1**

55. Socketed copper alloy axe, upper part

- **Copper alloy socketed axe**

- **Type:** Transitional
- **LE (remaining):** 7cm
- **WI (cutting edge): /**
- **WI (socket, inner-outer):** (squashed, remaining): 3,15-4,3cm
- **LE (socket, back-front, inner-outer):** (squashed, remaining): 1,7-2,9cm
- **WE:** 173,36g
- **Description:** Squashed upper part of copper alloy socketed axe with rib-and-pellet decoration. The rib-and-pellet decoration is made up of three ribs which are ca. 4,5cm in length terminating in pellets. The lower part of the axe is squashed and slightly bent; the cutting edge missing. Though misshapen now, the socket was most certainly aligned with the blade, thus not displaying the back-front shape. It has a thicker upper mouth moulding and a rib-like lower mouth moulding that runs diagonally across the upper part of the face. The loop is unusually thin.
- **Note:** The axe may have been miscast.
- **Museum Accession Number: 31/1982/2**
- **Plate 2**

56. Socketed copper alloy axe, lower part

- **Copper alloy socketed axe**
- **Type:** Blandford
- **LE:** ca. 6,5cm
- **WI (cutting edge):** 5,7cm
- **WI (socket, inner-outer):** /
- **LE (socket, back-front, inner-outer):** /
- **WE:** 137,422g
- **Description:** Cast copper alloy socketed looped axe decorated with two ribs that run parallel to each face/side corner of the axe. The axe show limited signs of use and sharpening: There are few sharpening lines that run parallel to the cutting edge but there are no signs of heavy wear/use such as nicks and dents in the blade or repeated sharpening.
- **Note:** The axe may have been miscast because one face was much thinner than the other (1mm and 5mm). It is heavier than other Blandford type axes and has a less shiny surface. This suggests the use of a different alloy.
- **Museum Accession Number: 31/1982/3**
- **Plate 2**

57. Socketed copper alloy axe, lower part

- **Copper alloy socketed axe**
- **Type:** Uncertain
- **LE:** 3,8cm
- **WI (cutting edge):** 5,5
- **WI (socket, inner-outer): /**
- **LE (socket, back-front, inner-outer):** /
- **WE:** 91,398g

- **Description:** Lower part of Cast copper alloy socketed looped axe (very similar to no. 56), but there is no trace of decoration left and the fragment is much corroded. It is difficult to make out any traces of wear.
- **Museum Accession Number: 31/1982/4**
- **Plate 3**

58. Socketed copper alloy axe, lower part

- **Copper alloy socketed axe**
- **Type:** Uncertain
- **LE:** 9,2cm
- **WI (cutting edge):** 4,3cm
- **WI (socket, inner-outer): /**
- **LE (socket, back-front, inner-outer):** /
- **WE:** 211,04g
- **Description:** Lower part of a copper alloy socketed axe, probably without decoration. The blade is blunt and there are no obvious signs of re-sharpening. The upper part and rim of the fragment are slightly bent since the upper half of the socket was torn off.
- **Note:** Size and shape suggests that this was either a plain South-Eastern or an Armorican type axe.
- **Museum Accession Number: 31/1982/5**
- **Plate 3**

59. Socketed copper alloy axe, lower part

- **Copper alloy socketed axe**
- **Type:** Uncertain
- **LE:** 4,8cm
- **WI (cutting edge):** 4cm
- **WI (socket, inner-outer): /**
- **LE (socket, back-front, inner-outer):** /
- **WE:** 61,25g
- **Description:** Lower part of copper alloy socketed axe. The blade is narrow and the sides fairly straight. The cutting edge is shiny from usage and there are distinct resharpening marks. The upper rim is torn and bent.
- **Museum Accession Number: 31/1982/6**

60. Socketed copper alloy axe, fragment

- **Copper alloy socketed axe**
- **Type:** Uncertain
- **LE:** 3,4cm (x 3,2cm)
- **WI (cutting edge): /**
- **WI (socket, inner-outer): /**
- **LE (socket, back-front, inner-outer):** /
- **WE:** 26,55g
- **Description:** Mouth fragment of socketed copper alloy axe, part of loop and double mouth moulding remains as well as the upper part of two ribs. The fragment is slight bent and torn.
- **Museum Accession Number: 31/1982/7**

61. Socketed copper alloy axe (?), small fragment

- **Copper alloy socketed axe**
- **Type:** Uncertain
- **LE:** 2,1x1,8cm
- **WI (cutting edge): /**
- **WI (socket, inner-outer): /**
- **LE (socket, back-front, inner-outer):** /
- **WE:** 8,01
- **Description:** Small fragment of copper alloy, possibly from socketed axe (?).
- **Museum Accession Number: 31/1982/8**

62. **Socketed copper alloy axe, small fragment**
    - **Copper alloy socketed axe**
    - **Type:** Uncertain, probably an Early Iron Age ribbed type
    - **LE:** 2,8x2,5cm
    - **WI (cutting edge): /**
    - **WI (socket, inner-outer): /**
    - **LE (socket, back-front, inner-outer):** /
    - **WE:** 9,93g
    - **Description:** Fragment from body/edge of face of socketed copper alloy axe with ribbed decoration – remains of two evenly spaced ribs are still recognisable.
    - **Museum Accession Number: 31/1982/9**
63. **Socketed copper alloy axe, small fragment**
    - **Copper alloy socketed axe**
    - **Type:** Uncertain
    - **LE:** 3,2x1,5cm
    - **WI (cutting edge): /**
    - **WI (socket, inner-outer): /**
    - **LE (socket, back-front, inner-outer):** /
    - **WE:** 14,09g
    - **Description:** Small fragment of part of face and edge of copper alloy socketed axe. One thin casting seam is still recognisable, but the fragment is bent and the original form of sides and face are unrecognisable.
    - **Museum Accession Number: 31/1982/10**
64. **Socketed copper alloy axe, fragment**
    - **Copper alloy socketed axe**
    - **Type:** Uncertain
    - **LE:** 4,6x2,1cm
    - **WI (cutting edge): /**
    - **WI (socket, inner-outer): /**
    - **LE (socket, back-front, inner-outer):** /
    - **WE:** 12,16g
    - **Description:** Fragment of a Cast copper alloy socketed looped axe – probably part of the side of the axe, as it seems that a casting seam runs across the surface of the axe. However, there is an internal ‘rib’ to match the one on the outside and it might be possible that the ‘casting seam’ is part of a ribbed

decoration since the internal rib usually situated on the inside of the faces, not the sides.
    - **Museum Accession Number: 31/1982/11**

65. **Socketed copper alloy axe, fragment**
    - **Copper alloy socketed axe**
    - **Type:** Uncertain
    - **LE:** 4,1x2,1cm
    - **WI (cutting edge): /**
    - **WI (socket, inner-outer): /**
    - **LE (socket, back-front, inner-outer):** /
    - **WE:** 18,41g
    - **Description:** Fragment of Cast copper alloy socketed looped axe – probably from the edge of one of the faces as traces of one rib from a ribbed decoration and a small part of the casting seam remain.
    - **Museum Accession Number: 31/1982/12**
66. **Socketed copper alloy axe, small fragment**
    - **Copper alloy socketed axe**
    - **Type:** Uncertain
    - **LE:** 3,3x2,8cm
    - **WI (cutting edge): /**
    - **WI (socket, inner-outer): /**
    - **LE (socket, back-front, inner-outer):** /
    - **WE:** 15,06g
    - **Description:** Small fragment of Cast copper alloy socketed looped axe – probably part of the edge of one of the faces.
    - **Museum Accession Number: 31/1982/13**
67. **Socketed copper alloy axe, small fragment**
    - **Copper alloy socketed axe**
    - **Type:** Uncertain
    - **LE:** 3,6x2,1cm
    - **WI (cutting edge): /**
    - **WI (socket, inner-outer): /**
    - **LE (socket, back-front, inner-outer):** /
    - **WE:** 23,34g
    - **Description:** Mouth fragment of Cast copper alloy socketed looped axe, bent and corroded. One thick mouth moulding only.
    - **Museum Accession Number: 31/1982/14**
68. **Socketed copper alloy axe, tiny fragment**
    - **Copper alloy socketed axe**
    - **Type:** Uncertain
    - **LE:** 2x2,2cm
    - **WI (cutting edge): /**
    - **WI (socket, inner-outer): /**
    - **LE (socket, back-front, inner-outer):** /
    - **WE:** 8,73g
    - **Description:** Fragment of Cast copper alloy socketed looped axe – probably from one of the edges of a face.
    - **Museum Accession Number: 31/1982/15**

69. **Socketed copper alloy axe, small fragment**
    - **Copper alloy socketed axe**
    - **Type:** Uncertain
    - **LE:** 3,9x2,0cm
    - **WI (cutting edge): /**
    - **WI (socket, inner-outer): /**
    - **LE (socket, back-front, inner-outer):** /
    - **WE:** 10,48
    - **Description:** Small fragment of Cast copper alloy socketed looped axe – probably from one of the edges of a face.
    - **Museum Accession Number: 31/1982/16**
70. **Socketed copper alloy axe, tiny fragment**
    - **Copper alloy socketed axe**
    - **Type:** Uncertain
    - **LE:** 2,2x1,7cm
    - **WI (cutting edge): /**
    - **WI (socket, inner-outer): /**
    - **LE (socket, back-front, inner-outer):** /
    - **WE:** 5,66g
    - **Description:** Small fragment, probably of a Cast copper alloy socketed looped axe (?).
    - **Museum Accession Number: 31/1982/17**
71. **Socketed copper alloy axe, fragment from mouth**
    - **Copper alloy socketed axe**
    - **Type:** Uncertain
    - **LE:** 3,4x3,1cm
    - **WI (cutting edge): /**
    - **WI (socket, inner-outer): /**
    - **LE (socket, back-front, inner-outer):** /
    - **WE:** 30,7g
    - **Description:** Mouth fragment of a Cast copper alloy socketed looped axe with thick single mouth moulding; probably undecorated (?).
    - **Museum Accession Number: 31/1982/18**
72. **Copper alloy fragment**
    - **Type:** Uncertain
    - **LE:** 3,8x2,2cm
    - **WI (cutting edge): /**
    - **WI (socket, inner-outer): /**
    - **LE (socket, back-front, inner-outer):** /
    - **WE:** 12,38g
    - **Description:** Copper alloy fragment, probably from a socketed implement – a faint casting seam is recognisable, but the metal is very thin and although it looks like it was part of a mouth of an axe (or some other tool), there is no mouth moulding.
    - **Museum Accession Number: 31/1982/19**
73. **Socketed copper alloy axe, fragment**
    - **Copper alloy socketed axe**
    - **Type:** Uncertain

- **LE:** 3,1x3,2cm
- **WI (cutting edge): /**
- **WI (socket, inner-outer): /**
- **LE (socket, back-front, inner-outer):** /
- **WE:** 30,29g
- **Description:** Folded body fragment of a socketed axe. The axe probably was undecorated; part of the casting seam is still faintly visible along the side. The fragment has been folded and hammered flat.
- **Museum Accession Number: 31/1982/20**

- **Remaining fragments of objects and casting waste:**

- Casting sprue

- **LE:** ca. 4,9x4,0cm
- **WI (cutting edge): /**
- **WI (socket, inner-outer): /**
- **LE (socket, back-front, inner-outer):** /
- **WE:** 73,01cm
- **Description:** Copper alloy casting sprue left over from the casting process of a socketed copper alloy axe.
- **Museum Accession Number: 31/1982/21**

- Part of sprue (?)

- **Museum Accession Number: 31/1982/22**
- **LE:** 2,6x3,5cm
- **WI (cutting edge): /**
- **WI (socket, inner-outer): /**
- **LE (socket, back-front, inner-outer):** /
- **WE:** 50,46g
- **Description:** Possibly part of copper alloy casting sprue.

- Copper alloy fragment

- **Museum Accession Number: 31/1982/23**
- **LE:** 3,0x3,9cm
- **WI (cutting edge): /**
- **WI (socket, inner-outer): /**
- **LE (socket, back-front, inner-outer):** /
- **WE:** 31,03g
- **Description:** Copper alloy waste – possibly left over from casting process (?).

- Copper alloy fragment

- **Museum Accession Number: 31/1982/24**
- **LE:** 2,8x3,1cm
- **WI (cutting edge): /**
- **WI (socket, inner-outer): /**
- **LE (socket, back-front, inner-outer):** /
- **WE:** 3,6g
- **Description:** The fragment is very thin and bears a decoration of three ribs close to one of the edges. It may have been part of sickle, or possibly a LBA razor (Type Feltwell)?

- Tiny copper alloy fragment

- **Museum Accession Number: 31/1982/25**
- **LE:** 1,5x1,5cm
- **WI (cutting edge): /**
- **WI (socket, inner-outer): /**
- **LE (socket, back-front, inner-outer):** /
- **WE:** 1,47g
- **Description:** Tiny circular fragment. Bent and very thin.

- Tiny copper alloy fragment

- **Museum Accession Number: 31/1982/26**
- **LE:** 1,8x0,9cm
- **WI (cutting edge): /**
- **WI (socket, inner-outer): /**
- **LE (socket, back-front, inner-outer):** /
- **WE:** 1,11g
- **Description:** Small fragment of copper alloy, bent at right angle.

- Cauldron fragment:

- **Type:** Class B1
- **LE: /**
- **WI (cutting edge): /**
- **WI (socket, inner-outer): /**
- **LE (socket, back-front, inner-outer):** /
- **WE: /**
- **Description:** Small strip of sheet from centre part of the rim; flat section carries decoration of transverse ribs.
- **Reference:** Gerloff 2010, 188+194, no. 45.
- **Museum Accession Number: 31/1982/27 (could not be taken off display)**

- Fragment of copper alloy

- **LE:** 2,2x2,0cm
- **WI (cutting edge): /**
- **WI (socket, inner-outer): /**
- **LE (socket, back-front, inner-outer):** /
- **WE:** 13,87g
- **Description:** Possibly small fragment of copper alloy cake.
- **Museum Accession Number: 31/1982/28**
-

- **Note:**
  - Found outside of Kings Weston Down Camp, Kingsweston Hill.
  - In the 1920s E.K. Tratman published the excavations of ca. five tumuli from this site, and proposed a Late Bronze Age/Early Iron Age transitional date for them. However, the finds were scarce and the pottery was, unfortunately, destroyed in World War II. The re-analysis of the material after publication of the radio-carbon dates from the site led to a heated debate, but no solution (briefly discussed in Locock 2001, 126)

- **References:**
  - Tratman, 1922-23, 76-83
  - Tratman 1925, 238-244
  - Rahtz 1956-7, 30-39
  - Grinsell 1986, 31, 35, Pl. 3.9.
  - Locock 2001, fig.11,5.
- **Bristol:** Bristol City Museum and Art Gallery (31.1982.1-28)
- **Plates 1-3**

Single finds:

74. Hotwells, Bristol (centred on R Avon at Hotwells: ST571721)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 12,5cm
- **WI (cutting edge):** 5,8cm
- **WI (socket, inner-outer):** 3,8-4,9cm
- **LE (socket, back-front, inner-outer):** 3,5-4,6cm
- **WE:** 405,45g
- **Description:** Cast copper alloy socketed looped axe with dark golden patina and smooth surface. The axe has a double mouth moulding with a thicker upper and thinner lower mouth moulding. Both faces are decorated with three ribs (ca. 6,3cm in length) terminating in small pellets. The cutting edge was hammered to create a splayed shape. The sides of the axes are, however almost parallel.
- **Note:** Found in the River Avon in construction of new locks by Mr. Slade in 1870; presented to the Barrow Naturalists Field Club 1896.
- **Note:** The axe is very similar to the complete axe from the Cardiff II (Leckwith) hoard (no. 1293).
- **References:**
  - Anon 1904, 330, Plate II, no. 3.
  - Tratman 1944-46, 175, fig. 5, 3.
  - Pearce 1983, 505, no. 603.
- **Bristol:** Bristol County Museum F 881 (68a)
- **Plate 4**

<u>Buckinghamshire</u>

Hoards: None

Single finds:

75. Long Crendon, Buckinghamshire (centred on town: SP695085)

- **Copper alloy socketed axe**
- **Type:** Transitional (linear-facetted)

- **LE:** 10.3cm
- **WI (blade):** 5.1cm
- **WI (socket, inner-outer):** 2.2-3.2cm
- **LE (socket, back-front, inner-outer):** 2.4-3.1cm
- **WE:** 231g
- **Description:** Copper alloy socketed axe with high collar, double mouth moulding and a widely splayed blade. The axe is decorated with facets that are embellished with ribs.
- **References:** Unpublished.
- **Oxford:** Ashmolean Museum (2550.1887)
- **Plate 4**

76. Maids' Moreton, Buckinghamshire (centred on field: SP713352)

- **Iron socketed axe**
- **Type:** Iron socketed axe
- **Note:** Casual find; no other Late Bronze Age or Early Iron Age finds come from the field where the axe was found while ploughing.
- **NB:** This axe may be Roman in date (Kevin Leahy *pers. comm.*).
- **References:** Manning and Saunders 1972, 276-292.
- **Buckingham Archaeological Society**

<u>Cambridgeshire</u>

Hoards:

77.-78. Bassingbourn, Cambridgeshire (centred on village: TL335435)

- **Axe Hoard**
- **Type:** Transitional
- **Description:** Two copper alloy socketed axes.
- **77. Cast copper alloy socketed looped axe (1)**
  - **Type:** Transitional
  - **LE:** 10cm
  - **WI (cutting edge):** 5,1cm
  - **WI (socket, inner-outer):** 2,9-3,9cm
  - **LE (socket, back-front, inner-outer):** 3,1-3,9cm
  - **WE:** 291,3g
  - **Description:** Socketed looped cast copper alloy axe of Transitional type. It has the overall shape of a plain South Eastern axe, but the sides are very straight and the cutting edge is comparatively narrow. The upper mouth moulding is unusually thick and the socket is sub-rectangular. In addition, it has a unique moulded decoration: on one face there is just one central pellet and on the other face, there is a 'half' of a pellet-in-roundel just below the lower mouth moulding.
  - **Cambridge:** University of Cambridge Museum of Anthropology and Archaeology (Z.4239)

- **78. Cast copper alloy socketed looped axe (2)**
  - **Type:** Transitional
  - **LE:** 11cm
  - **WI (cutting edge):** 3,9cm
  - **WI (socket, inner-outer):** 2,8-3,5cm
  - **LE (socket, back-front, inner-outer):** 2,6-3,6cm
  - **WE:** 200,2g
  - **Description:** Socketed looped cast copper alloy axe of very slender South Eastern type. The axe is decorated with one pellet, just below the lower mouth moulding on one face and with a pellet-in-roundel just below the lower mouth moulding on the other face. Also, the mouth is slightly sub-rectangular and the upper mouth moulding is much thicker than the lower mouth moulding.
  - **Cambridge:** University of Cambridge Museum of Anthropology and Archaeology (Z4240)
- **References:** Unpublished.
- **Cambridge:** University of Cambridge Museum of Anthropology and Archaeology (Z4239 and 4240)
- **Plate 5**

79.-80. Quy Fen, Cambridgeshire (centred on Stow cum Quy Fen: TL517623)

- **Axe Hoard**
- **Type:** Sompting, Cardiff II variant
- **Description:** Two socketed copper alloy axes.
- **79. Cast copper alloy socketed looped axe (1)**
  - **Type:** Sompting, Cardiff II variant
  - **LE:** 12,7cm
  - **WI (cutting edge):** 5,8cm
  - **WI (socket, inner-outer):** 3,5-4,7cm
  - **LE (socket, back-front, inner-outer):** 3,5-4,7cm
  - **WE:** 398,42g
  - **Description:** Cast copper alloy socketed looped axe with patchy bright turquoise patina on one of its faces. The rest of the surface is freckled with dark golden, dull brown, white-beige and greenish patches and flecks. The axe possesses a square double mouth moulding with a thicker upper and a thinner lower moulding. The lower part of the decoration is faded, but the three ribs (ca. 5,2cm) on each face are still recognisable. However, it is still possible to see the faint pellets and circlets in which the ribs terminate. The casting seams are not very prominent, but they have not been hammered or smoothed down. Only the cutting edge was re-worked after casting: It is slightly splayed now and much rounder than on the other axe it was found with. Also, there are re-sharpening marks and the axe has clearly been used. There are some recent scratches on the surface of the axe – probably from a plough or a spade. On one of the faces is a

broad shallow dent which may have resulted from hitting the axe with a hammer or another blunt instrument. The dent is very shallow indeed, but the surface is cracked and it certainly results from a powerful blow.
        - **Museum Accession Number: WG 1988**
    - **80. Cast copper alloy socketed looped axe (2)**
        - **Type:** Sompting, Cardiff II variant
        - **LE:** 13cm
        - **WI (cutting edge):** 5,5cm
        - **WI (socket, inner-outer):** 3,1-4,45cm
        - **LE (socket, back-front, inner-outer):** 3,4-4,6cm
        - **WE:** 392,93g
        - **Description:** Cast copper alloy socketed looped axe of dull sandy-brown colour freckled with black and white spots and larger patches of white and turquoise-greenish patina. The axe has a somewhat sub-rectangular, bulgy double mouth moulding and still visible casting seams. The casting seams look as if they had been hammered flat and the sides are smooth. The axe is decorated with three ribs ending in pellets on each face, but just like on the faces of the other axe, the pellets are faded or maybe even hammered flat. They are hardly recognisable anymore. The cutting edge has been slightly re-worked: it is very slightly splayed and curves somewhat downwards. Also, the axe has been re-sharpened and probably used.
        - **Note:** On both sides, the pellet of the left rib is the clearest visible, while the other two have almost vanished.
        - **Museum Accession Number: WG 1989**
    - **References:** Unpublished.
    - **London:** British Museum (WG 1988 and 1989)
    - **British Museum Register:** “Quy Fen, Cambridgeshire, found with last/next”
    - **Plate 5+6**

81.-82. Wicken Fen, Cambridgeshire (centred on Wicken Fen: TL565705)
- **Axe Hoard**
- **Type:** Linear-decorated
- **Description:** Two socketed copper alloy axes.
- **81. Cast copper alloy socketed looped axe (1)**
    - **Type:** Linear-decorated
    - **LE:** 10cm
    - **WI (cutting edge):** 5,4cm
    - **WI (socket, inner-outer):** 2,65-3,4cm
    - **LE (socket, back-front, inner-outer):** 2,6-3,4cm
    - **WE:** 157,6g
    - **Description:** Cast copper alloy socketed looped axe of linear-decorated type. The surface is too corroded to be certain whether it was used and re-sharpened, but as the blade is splayed, it can at least be said that the blade has been

reworked. There is a small hole between the two mouth mouldings, but it seems a later addition, not a casting flaw.
        - **Museum Accession Number:** University of Cambridge Museum of Anthropology and Archaeology, 27.610a
    - **82. Cast copper alloy socketed looped axe (2)**
        - **Type:** Linear-decorated
        - **LE:** 10,6cm
        - **WI (cutting edge):** 5,3cm
        - **WI (socket, inner-outer):** 2,8-3,3cm
        - **LE (socket, back-front, inner-outer):** 2,7-3,3cm
        - **WE:** 194,4g
        - **Description:** Cast copper alloy socketed looped axe of linear-decorated type. The axe is decorated with thin curved ribs parallel to the edge of the faces. On one face there is an additional central rib ending in a pellet(?) or a roundel-and-pellet(?). It has a double mouth moulding and its upper mouth moulding is much thicker than that of its counterpart a. The loop is thin and splayed. The blade has been reworked, but the surface is too corroded to be able to recognise exact signs of wear and patterns of re-sharpening
        - **Museum Accession Number:** University of Cambridge Museum of Anthropology and Archaeology, 27.610b
    - **References:**
        - O'Connor 1980, 419, No. 213 and p. 583, List 227, 5.
        - Thomas 1989, 282.
        - Huth 1997, 273.
    - **Cambridge:** University of Cambridge Museum of Anthropology and Archaeology (27 610 A and B)
    - **Plate 7**

Single finds:

83. Bassingbourn, Cambridgeshire (centred on village: TL335435)
- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant (?)
- **Description:** The drawing presented in the Victoria County History shows a large socketed axe with single mouth moulding and slight collar (?) underneath. Five ribs descend from this collar. The three central ribs end in a pellet-in-circlet, the two outer ribs only in a pellet.
- **Note:** The axe is missing in the University of Cambridge Museum of Anthropology and Archaeology. Apparently it was part of the Random Collection, but is now lost. It is possible that it is now in the Ashmolean Museum, Oxford, but it could not be traced at the time of my visit there, either.
- **References:** Victoria County History (Cambridgeshire), Vol. 1 (1938), 279-80, fig. 20, 21.

- **Cambridge/Oxford:** University of Cambridge Museum of Anthropology and Archaeology (Cambridge) or Ashmolean Museum (Oxford)

84. Lode (formerly Bottisham Lode), Cambridgeshire (centred on Lode: TL535625)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 12,5cm
- **WI (cutting edge):** 6,0cm
- **WI (socket, inner-outer):** 3,6-4,7cm
- **LE (socket, back-front, inner-outer):** 3,4-4,8cm
- **WE:** 411,0g
- **Description:** Socketed looped cast copper alloy axe with dark green-brownish patina and turquoise and white flecks. The axe has one thick single mouth moulding and the socket is not aligned with the blade. The cutting edge has been hammered into splayed form and shows signs of wear (re-sharpening marks). The decoration is the same on both faces: three ribs (ca 5,2cm) terminating in pellets. Below this first row of pellets the ribs continue for about another centimetre, but they are much less pronounced than they were above the pellets. They then terminate in another, less pronounced pellet. The edges of the two faces bear a rib of ca 6,2cm ending in a pellet of the same size and height as the pellets of the lower row. The loop is spurred and displays a unique decoration. The upper and lower corners of the loop are spurred/splayed so that the loop resembles a large 'X' Below the lower part of the loop is another pair of moulded diagonal short ribs extending from the point where the loop touches the body of the axe (compare drawing).
- **Note:** The mouldings around the loop have been described by Burgess as a characteristic feature for Sompting type axes, but generally, they are very rare (Burgess 1971, 267-72).
- **References:** Evans 1881, 123, fig. 135.
- **London:** British Museum (1875, 4-1, 32)
- **British Museum Register:** Object from Collection of Rev. Dr. W. Sparrow Simpson Bottisham Lode, Cambs." (there were 44 objects, mainly palstaves and axes).
- **Plate 7**

85. Lode (formerly Bottisham Lode), Cambridgeshire (TL535625)

- **Copper alloy axe**
- **Type:** Sompting, Tower Hill variant
- **LE:** 11,8cm
- **WI (cutting edge):** 6,5cm
- **WI (socket, inner-outer):** 2,65-2,8cm
- **LE (socket, back-front, inner-outer):** 3,0-3,95cm
- **WE:** 381,2g

- **Description:** Socketed looped cast copper alloy axe with a sub-rectangular socket and double mouth moulding with a thick upper and thinner lower mouth moulding. The loop is almost circular and the sides are diverging into a wide, splayed blade. The axe has a unique decoration of four pellets-in-roundels which are aligned vertically and which may be, on one face at least, connected by short ribs between the roundels. The surface is quite dark and corroded, so it is difficult to see exact details of the decoration. On the same face, there is another pellet-in-roundel, just next and a bit below the last one in the row.
- **References:** Unpublished.
- **Cambridge:** University of Cambridge Museum of Anthropology and Archaeology (Z.25051)
- **Plate 8**

86. 'near Cambridge', Cambridgeshire (centred on Cambridge: TL465585)

- **Copper alloy socketed axe**
- **Type:** Linear-decorated
- **Description:** The right and left side of the faces are decorated with three outwards curving ribs, and there is also a central rib ending in a flat pellet.
- **Note:** There is a very similar axe on display in the University of Cambridge Museum of Anthropology and Archaeology (this axe's central rib ends in a rib and pellet/circlet though) and another one in Mr. H. Prigg's Collection from Mildenhall, Suffolk (no. 980).
- **References:**
  - Evans 1881, 127+145.
  - O'Connor 1980, 583, List 227, 1.
- **London:** British Museum (Mr. Lichfield's Collection)

87. ?Cambridge area (near Ely?) (centred on Ely: TL551796)

- **Copper alloy socketed axe**
- **Type:** Linear-decorated
- **LE:** 10,8cm
- **WI (cutting edge):** 5,5cm
- **WI (socket, inner-outer):** 2,15-3,25cm
- **LE (socket, back-front, inner-outer):** 2,3-3,4cm
- **WE:** 220,6g
- **Description:** Socketed looped cast copper alloy axe of linear-decorated type. The axe has an unpronounced double mouth moulding, with a thicker upper and thinner lower moulding. The socket is almost sub-rectangular. The blade is splayed and shows clear signs of wear and resharpening. The axe bears the typical linear decoration along the edges of the face, but also a unique decoration in the centre of each face: a single rib that bifurcates, each end terminating in a roundel with a (?)central pellet.

- **Note:** Due to the unique decoration and slight casting flaws that appear on both axes (nos. 87. And 88.) it is very likely that they were made in the same mould or from the same mould template.
- **References:** O'Connor 1980, fig. 583, List 227, 2, fig. 74, 1 (probably).
- **Cambridge:** University of Cambridge Museum of Anthropology and Archaeology (48.2525.A)
- **Plate 8**

88. The Fens, near Ely, Cambridgeshire (centred on Fens: TL556793)

- **Copper alloy socketed axe**
- **Type:** Linear-decorated
- **LE:** 10.4.
- **WI (blade):** 5.6cm
- **WI (socket, inner-outer):** 2.5-3.2cm
- **LE (socket, back-front, inner-outer):** 2.6-3.35cm
- **WE:** 181g
- **Description:** Socketed cast copper alloy axe with an additional decoration of a central rib that bifurcates in the lower part of the body. Both fork ends terminate in a circle; this decoration may be found also on the axe from the ?Cambridge area (near. Ely?), no. 87.
- **Note:** Due to the unique decoration and slight casting flaws that appear on both axes it is more than likely that they come from the same mould.
- **References:** Unpublished.
- **Oxford:** Ashmolean Museum (1927.2623)
- **Plate 9**

89. 'Cambridgeshire Fens' (no NGR as area to large)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant (?Cardiff II)
- **Description:** Socketed axe with rib-and-pellets-decorated faces.
- **Note:** Mentioned by Evans as being similar to the socketed axes from Broughton (near Malton) Yorkshire (no. 1221), and from the River Thames at Erith (no. 806).
- **References:** Evans 1881, 122.
- **Location:** Unknown.

90. Fen Ditton, Cambridgeshire (centred on village: TL490606)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 13,0cm
- **WI (cutting edge):** 5,2cm
- **WI (socket, inner-outer):** 3,6-4,5cm
- **LE (socket, back-front, inner-outer):** 3,3-4,5cm
- **WE:** 426g
- **Description:** Socketed looped cast copper alloy axe with dark brown-reddish patina. The axe has a double mouth moulding with

a thicker upper and thinner lower mouth moulding. The socket is aligned with the blade. The loop is very thick and although the sides of the axe are only slightly splayed (thus giving it a narrow cutting edge) and the axe shows signs of wear. The re-sharpening marks are clearly visible and the axe is still sharp today. The axe is decorated with a variant of the rib-and-pellet ornament: On each side there are three bundles of three ribs (LE: 5,1-5,2cm), the outer ribs of the two outer bundles coinciding with the edges of the axe's two faces. All ribs terminate in small, more or less pronounced pellets.

- **References:** Evans 1881, 123, fig. 134.
- **London:** British Museum (WG 1990)
- **British Museum Register:** Greenwell collection: "Fen Ditton, Cambridgeshire"
- **Plate 9**

91. Fen Drayton, Cambridgeshire (centred on village: TL335703)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant (?)
- **Description:** Heavy implement with single square mouth moulding and rib-and-pellet decoration. There are five ribs on each face; the two outer ones coincide with the edges of the faces and all ribs terminate in a small round pellet. There is a second row of pellets, set just above the first, but only on the three central ribs.
- **Note:** Part of the wooden haft was found inside the socket.
- **References:** Heal 1979, 37.
- **Cambridge:** University of Cambridge Museum of Anthropology and Archaeology (78.49)

92. Fordham, Cambridgeshire (centred on village TL625705)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **LE:** 12cm
- **WI (cutting edge):** 5,7cm
- **WI (socket, inner-outer):** 2,7-3,7cm
- **LE (socket, back-front, inner-outer):** 3,0-4,2cm
- **WE:** 362,8g
- **Description:** Socketed looped cast copper alloy axe with sub-rectangular socket and double mouth moulding. The upper mouth moulding is considerably thicker than the lower mouth moulding which is only a rib. The axe is decorated with four ribs (length: 5,4cm) ending in a circlet on each face. The outer ribs coincide with the edges of the faces. The axe has remained its sharpness, but due to the scratched condition of the surface, sharpening marks and other signs of wear are difficult to make out.
- **References:** Fox 1923, p. 57-60.
- **Cambridge:** University of Cambridge Museum of Anthropology and Archaeology (1903.147)

- **Plate 9 + 10**

93. Horningsea, Cambridgeshire (centred on village: TL495625)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **LE:** 12cm
- **WI (cutting edge):** 6,1cm
- **WI (socket, inner-outer):** 3,05-3,6cm
- **LE (socket, back-front, inner-outer):** 3,25-4,1cm
- **WE:** 386,3g
- **Description:** Socketed looped cast copper alloy axe with rectangular socket and single mouth moulding. The axe is wedge-shaped and its loop is missing (faulty casting/damaged). The surface is scratched and it is possible that about half of the decoration has been lost in a more recent attempt to hammer the axe into shape or re-sharpen it. The remaining decoration consist of three bundles of two ribs each (length ca. 6,1cm) which connect three pellet-and-roundels just below the mouth moulding and three rib-and-roundels on the body of the axe. On one face the pellet-and-roundels stand much more than on the other The lower half of the body has been hammered and reworked, probably in modern times, but it is possible that there are now faint 'shadows' of another row of three (?) pellet-in-roundels below the first.
- **References:** Fox 1923, 57-60.
- **Cambridge:** University of Cambridge Museum of Anthropology and Archaeology (83.149)
- **Plate 10**

94. Ely District, Cambridgeshire (centred on Ely District: TL543774)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 12,3cm
- **WI (cutting edge):** 6,5cm
- **WI (socket, inner-outer, ca.):** 3,4-4,3cm
- **LE (socket, back-front, inner-outer, ca.):** 3,2-4,7cm
- **WE (with haft):** 630g
- **Description:** Cast copper alloy socketed looped axe, very similar to the axes from Methwold (no. 909, Norfolk) and Scunthorpe (no. 840, Lincolnshire). It has a thick mouth moulding and an almost hexagonal body and its loop is spurred at the top and the bottom. The two bottom spurs bifurcate towards the edges of the face. Both faces are decorated with three long ribs terminating in pellets. There is another row of pellets, aligned with the lower one, ca. 1cm above it. However, this row only includes the three central ribs; the two ribs on the edges of the faces only terminate in a pellet, there is no additional one above.
- **Note:** Today, the axe is attached to a modern hilt.
- **References:** Unpublished.

- **Cambridge:** University of Cambridge Museum of Anthropology and Archaeology (22.550)
- **Plate 11**

95. Littleport Fen, Cambridgeshire (centred on Littleport Fen: TL549900)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **LE:** 12,1cm
- **WI (cutting edge):** 6,05cm
- **WI (socket, inner-outer):** 3,1-3,8cm
- **LE (socket, back-front, inner-outer):** 3,0-3,9cm
- **WE:** 375,4g
- **Description:** Socketed looped cast copper alloy axe with square socket and double mouth moulding. The axe has a very thick upper mouth moulding and the two faces are decorated with three very long ribs (ca. 6,5cm in length) which seem to terminate in a small flat pellet each. The surface is much scratched and the pellets are hardly recognisable. There are also ribs ending in a pellet on the edges of the faces. The blade has been hammered into slightly splayed shape and there are signs of wear and re-sharpening marks.
- **References:** Unpublished.
- **Cambridge:** University of Cambridge Museum of Anthropology and Archaeology (83.146)
- **Plate 12**

96. Newton, Cambridgeshire (centred on parish: TF435145)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 12,8cm
- **WI (cutting edge):** 5,3cm
- **WI (socket, inner-outer):** 3,3-4,6cm
- **LE (socket, back-front, inner-outer):** 3,4-4,7cm
- **WE:** 403,4g
- **Description:** Socketed looped cast copper alloy axe with rib-and-pellet/rib-and-pellet-in-circlet decoration. The axe has a dark brown/blackish patina with green patches. Large areas of the body are heavily corroded. It has a somewhat sub-rectangular double-mouth moulding with a thick upper mouth moulding and a thinner, rib-like mouth moulding underneath. Due to the corrosive products on the surface, it is difficult to determine whether the axe was used or re-sharpened. The sides of the axe are somewhat parallel and the cutting edge is not splayed. The axe is very heavy and bears a unique decoration (the same on both faces): three thick ribs (length: 3,9cm) ending in a pellet on each side with thinner ribs continuing below the pellets (ca. 7mm) ending in another pellet. These pellets are encircled by a thick circlet of ca. 1cm diameter.
- **References:** Unpublished.

- **London:** British Museum (no reg.)
- **Plate 12**

97. Newark, Peterborough, Cambridgeshire (centred on Flag Fen: TL222994)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **LE:** 11,2cm
- **WI (cutting edge):** 6,2cm
- **WI (socket, inner-outer):** 2,9-3,15cm
- **LE (socket, back-front, inner-outer):** 3,15-3,7cm
- **WE:** 305g
- **Description:** Socketed looped cast copper alloy axe with oval sub-rectangular socket and double mouth moulding. The upper mouth moulding is elongated in shape and slightly thicker than the lower moulding. The axe has diverging sides and although it is neither linear-facetted nor linear-decorated, it is very similar and of the same form as, e.g. the axe from Reach (no. 98). The axe is decorated with one thin central rib on each side, but the surface is too worn and scratched to determine if it ended in a rib or pellet. The axe is still fairly sharp and the blade was hammered to give it a splayed outline, but there are no clear re-sharpening marks.
- **Label:** Tebbs Farm, Flag Fen Farm, Newark, Peterborough
- **Note:** Tebbs Farm no longer exists, grid ref. centred on Flag Fen
- **References:** Unpublished.
- **Cambridge:** University of Cambridge Museum of Anthropology and Archaeology (74.201)
- **Plate 13**

98. Reach, Cambridgeshire (centred on village: TL565665)

- **Copper alloy socketed axe**
- **Type:** Linear-decorated
- **LE:** 10,55cm
- **WI (cutting edge):** 5,5cm
- **WI (socket, inner-outer):** 2,55-3,4cm
- **LE (socket, back-front, inner-outer):** 2,8-3,35cm
- **WE:** 177,9g
- **Description:** Socketed looped cast copper alloy axe with a thick upper mouth moulding and a smaller mouth moulding underneath – the mouth is oval and only somewhat sub-rectangular. The upper body is not facetted but circular. The edges of the two faces are decorated with two deep grooves and another, slightly more shallow groove between the two deep ones. The grooves' edges are lined with moulded ribs. In the centre of each face is an additional rib terminating in a circlet with a pellet in the centre. It looks used and re-sharpened, although re-sharpening marks are very faint.
- **References:** O'Connor 1980, 583, List 227, 4, fig. 74, 2.

- **Cambridge:** University of Cambridge Museum of Anthropology and Archaeology (Z11408)
- **Plate 13+14**

99. Litlington Mills, Royston, Cambridgeshire (centred on village: TL322416)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **LE:** 13,1cm
- **WI (cutting edge):** 3,5cm
- **WI (socket, inner-outer):** 2,8-3,65cm
- **LE (socket, back-front, inner-outer):** 3,4-4,2cm
- **WE:** 289,5g
- **Description:** Socketed looped cast copper alloy axe of Armorican Type. The axe is damaged: part of the loop is missing and there is a hole in one of the faces, which did not occur due to faulty casting. Its patina is green with red patches and white flecks. The axe has a sub-rectangular double mouth moulding with a thicker upper and thinner lower mouth moulding. Like most Armorican axes, the axe shows no signs of wear or sharpening marks.
- **Note:** There is a note inside the socket which reads “WG 1891, Breton type, Litlington Mills, [n.] Royston: this is in Cambridgeshire. (It is in G. Clark’s list in VCH Cambridgeshire) but not specifi[ed] as Breton.”
- **References:** Unpublished.
- **London:** British Museum (WG 1891)
- **British Museum Register:** Greenwell Collection: “Litlington Mills, Royston”

Cheshire

Hoards: None

Single finds:

100. Congleton, Cheshire (centred on parish: SJ8562)

- **Copper alloy socketed axe**
- **Type:** linear-facetted/decorated?
- **Note:** This axe is part of a very uncertain hoard.
- **References:** Davey and Foster 1975, no. 88.
- **Congleton:** Eaton Hall.

101. Ellesmere Port, Cheshire (centred on parish: SJ415775)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **Description:** Heavy socketed axe with sub-rectangular double mouth moulding and five long ribs terminating in small pellets.

- **Note:** Very similar to one of the axes from the Llyn Fawr Hoard (no. 1294) and the complete axe from the Cardiff II Hoard (no. 1293).
- **References:** Davey 1976, fig. 7.27.
- **Runcorn:** Shaw Museum; **Chester:** Grosvenor Museum (118.P.67 cast)

102. Faddily, Cheshire (SJ592530)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant (small)
- **Description:** 39mm x 45mm. 51mm length of wooden haft found in socket.
- **Discussion:** The axe is very similar to the small Tower Hill variant axes from Llanmaes, Glamorgan, and Lovehayne, Devon.
- **Note:** Metal detector find
- **References:** www.finds.org.uk LVPL1129
- **Returned to finder.**
- **Plate 14**

Cornwall

Hoards:

103.+104. Carn Brea, Cornwall (centred on town: SW685415)

- **Axe Hoard**
- **Type:** Armorican
- **Description:** Possibly a large hoard of plain and ribbed Armorican axes from near a settlement site, one or two of which are in the Ashmolean Museum: (Mus. No: NC358 and NC359 and another, possibly in Penzance.
- **Note:** Two axes survive from a hoard of a number of socketed axes found in 1744. The Ashmolean Museum in Oxford only has one certain axe from Carn Brea, inscribed 'Karn Brê'. The other seems likely to be associated but due to lack of reference and labelling it is not certain.

103. Copper alloy socketed axe (1)

- **Type:** Armorican
- **LE:** 12.7cm
- **WI (blade):** 5.4cm
- **WI (socket, inner-outer):** 3.2-4.6cm
- **LE (socket, back-front, inner-outer):** 3.1-4.3cm
- **WE:** 374g
- **Description:** The surface of the axe is somewhat corroded, but the faces were probably decorated with three plain ribs. The mouth is square.
- **Museum Accession Number: NC358** (the number tag is missing, but the writing on the axe reads 'Karn Brê')

104. Copper alloy socketed axe (2)

- **Type:** Armorican

- **LE:** 11.6cm
- **WI (blade):** 3.2cm
- **WI (socket, inner-outer):** 2.7-3.4cm
- **LE (socket, back-front, inner-outer):** 3.0-3.9cm
- **WE:** 224g
- **Description:** Cast copper alloy socketed looped axe with clay core still inside. Loop missing (miscast).
- **Museum Accession Number: NC359** (there is no number written on the axe, and the tag with 'NC359' was not directly attached to, but lying under it)
- **References:**
  - Pearce 1983, 424, no 129.
  - Hencken 1939, 90.
  - Mercer et al. 1981, pl. I.
- **Plate 15**

105.-146. Viaduct Farm, Higher Roseworthy, Gwinear, Cornwall (centred on 200yds off Coswinsawsin roundabout: SW630392)

- **Axe Hoard**
- **Type:** Armorican (?)
- **Description:** Hoard of over 40 plain and ribbed socketed axes.
- **Note:**
  - Apparently, "…the axes were found all together within 200yds of Coswinsawsin Round, laid out in rows in a pit about 1 foot deep, covered with a stone, c. 2 feet in diameter." (Pearce 1983, 408)
  - The axes may be Armorican type axes, as Hencken states that "they were of north-western French type" (Hencken 1939, 89).
  - These finds might be connected with the Royal Institute of Cornwall's Museum 1899 accession of four axes 'found under a rock at Gwinear, from W.C. Borlase's Sale'. (Anon 1899, 152)
- **References:**
  - Hencken 1939, 89.
  - Pearce 1983, 408, no. 60.
  - Huth 1997, 273.
- **Truro:** Royal Institute of Cornwall Museum

147.-179. Mylor, Cornwall (SW810359)

- **Axe Hoard**
- **Type:** Sompting, Figheldean Down variant
- **Description:** 33 socketed axes of Sompting type, Figheldean Down variant and a Sompting/South Wales hybrid type; several were made in the same mould; most of them are ribbed, one possibly rib-and-pellet decorated (?).
- **147. (1.) Copper alloy socketed axe (SF 1)**
  - **Type:** Sompting, Figheldean Down variant

        - **Description:** Complete. Double mouth moulding with bulbous upper and thinner lower mouth moulding. Square mouth with rounded corners. Casting seams very thin and visibly flattened at blade end. Blade only a little expanded, sides straight; the overall shape of the axe is 'wedge-shaped'. Faces decorated with three plain moulded ribs. Possibly fine horizontal striations on both faces close to cutting edge. Blade thinly cast with flaky surface.
        - **LE:** 13.1cm
        - **LE: (mouth; back-front, inner-outer):** 2.8-4.2cm
        - **WI (mouth; inner-outer):** 3.2-4.3cm
        - **WI (blade):** 5.25cm
        - **LE (loop):** 0.6-0.9cm
        - **WE:** 444.6g
        - **Plate 20**
    - **148. (2.) Copper alloy socketed axe (SF 2)**
        - **Type:** Sompting
        - **Description:** Complete. See description for No. 1. Clear, fine horizontal striations on both faces close to cutting edge (axe was cleaned by finder).
        - **LE:** 13.1cm
        - **LE (mouth; back-front, inner-outer):** 2.6-4.2cm
        - **WI (mouth; inner-outer):** 3.1-4.2cm
        - **WI (blade):** 5.3cm
        - **LE (loop):** 0.6-0.9cm
        - **WE:** 447.8g
        - **Plate 21**
    - **153. (3.) Two joining mouth fragments of socketed axe (SF 3)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** They complete socketed axe No. 8 (SF 8, no. 154., see below).
        - **Fragment 3a: Length:** 3.3x2x1.7cm **Weight:** 21.6g
        - **Fragment 3b: Length:** 3.5x2.4x2.7cm **Weight:** 16.2g
        - **Plate 20**
    - **149. (4.) Copper alloy socketed axe (SF 4)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. See description for No. 1.
        - **LE:** 13.2cm
        - **LE (mouth; back-front, inner-outer):** 2.8-4.2cm
        - **WI (mouth; inner-outer):** 3.1-4.2cm
        - **WI (blade):** 5.25cm
        - **WI (loop):** 0.65-0.95cm
        - **WE:** 487.5g
        - **Plate 19**
    - **150. (5.) Cast copper socketed axe (SF 34)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. Double mouth moulding with bulbous upper and thinner lower mouth moulding. Square mouth with rounded corners. Casting seams very thin and

visibly flattened at blade end. Blade only a little expanded, sides straight; the overall shape of the axe is 'wedge-shaped'. Faces deco-rated with three plain moulded ribs. Possibly fine horizontal striations on both faces close to cutting edge. Blade very thinly cast.
    - **LE:** 12.9cm
    - **LE (mouth; back-front, inner-outer):** 2.6-4.2cm
    - **WI (mouth; inner-outer):** 3-4.3cm
    - **WI (blade):** 5.5cm
    - **WI (loop):** 0.6-0.95cm
    - **Weight:** 493.1g
    - **Plate 21**
- **151. (6.) Copper alloy socketed axe (SF 6)**
    - **Type:** Sompting, Figheldean Down variant
    - **Description:** Complete. See description for No. 1.
    - **LE:** 13.1cm
    - **LE (mouth; back-front, inner-outer):** 3.1-4.2cm
    - **WI (mouth; inner-outer):** 3.2-4.3cm
    - **WI (blade):** 5.3cm
    - **LE (loop):** 0.6-1cm
    - **Weight:** 493g
    - **Plate 19**
- **152. (7.) Copper alloy socketed axe (SF 7)**
    - **Type:** Sompting, Figheldean Down variant
    - **Description:** Complete. See description for No. 1.
    - **LE:** 13.1cm
    - **LE (mouth; back-front, inner-outer):** 2.5-4.2cm
    - **WI (mouth; inner-outer):** 3.1-4.2cm
    - **WI (blade):** 5.3cm
    - **LE (loop):** 0.6-0.95cm
    - **Weight:** 468.6g (no soil inside)
    - **Plate 21**
- **153. (8.) Copper alloy socketed axe (SF 8)**
    - **Type:** Sompting, Figheldean Down variant
    - **Description:** Incomplete. Double mouth moulding with bulbous upper and thinner lower mouth moulding. Square mouth with rounded corners. Casting seams very thin and visibly flattened at blade end. Blade only a little expanded, sides straight; the overall shape of the axe is 'wedge-shaped'. Faces deco-rated with three plain moulded ribs. Possibly fine horizontal striations on both faces close to cutting edge. Two joining fragments of mouth broken off (No. 3 (SF 3), see above).
    - **LE:** 13.1cm
    - **LE (mouth; back-front, inner-outer, including SF 3):** 2.4-4.2cm
    - **WI (mouth; inner-outer, including SF 3):** 3-4.3cm
    - **WI (blade):** 5.25cm
    - **LE (loop):** 0.6-1cm

        - **Weight:** 449.8g (487.7g including fragments (SF 3))
        - **Plate 20**
    - **154. (9.) Copper alloy socketed axe (SF 9)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. See description for No. 1
        - **Length:** 13.1cm
        - **LE (mouth; back-front, inner-outer):** 2.8-4.2cm
        - **WI (mouth; inner-outer):** 3-4.3cm
        - **WI (blade):** 5.25cm
        - **LE (loop):** 0.6-1cm
        - **Weight:** 496.7g
        - **Plate 20**
    - **155. (10.) Copper alloy socketed axe (SF 36)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. A little miscast double mouth moulding with bulbous upper and thinner lower mouth moulding. Square mouth with rounded corners. Casting seams very thin and visibly flattened at blade end. Blade only a little expanded, sides straight; the overall shape of the axe is 'wedge-shaped'. Both faces decorated with three plain moulded ribs. Possibly fine horizontal striations on both faces close to cutting edge.
        - **LE:** 13.1cm
        - **LE (mouth; back-front, inner-outer):** 2.6-4.3cm
        - **WI (mouth; inner-outer):** 3.1-4.3cm
        - **WI (blade):** 5.2cm
        - **LE (loop):** 0.65-0.9cm
        - **Weight:** 457.8g
    - **156. (11.) Copper alloy socketed axe (SF 11)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. See description for No. 1. Cutting edge probably not sharpened after casting.
        - **LE:** 13.1cm
        - **LE (mouth; back-front, inner-outer):** 2.1-4.2cm
        - **WI (mouth; inner-outer):** 3.2-4.3cm
        - **WI (blade):** 5.25cm
        - **LE (loop):** 0.6-0.9cm
        - **Weight:** 467.8g
        - **Plate 21**
    - **157. (12.) Copper alloy socketed axe (SF 12)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. See description for No. 1.
        - **LE:** 13.1cm
        - **LE (mouth; back-front, inner-outer):** 2.8-4.2cm
        - **WI (mouth; inner-outer):** 2.9-4.2cm
        - **WI (blade):** 5.35cm
        - **LE (loop):** 0.65-0.9cm
        - **Weight:** 508.1g
        - **Plate 19**

- **158. (13.) Copper alloy socketed axe (SF 13)**
  - **Type:** Sompting, Figheldean Down variant
  - **Description:** Complete. See description for No. 1. There is one deep dent on one of the faces, which may have been inflicted by a hammer (?).
  - **LE:** 13.1cm
  - **LE (mouth; back-front, inner-outer):** 2.5-4.2cm
  - **WI (mouth; inner-outer):** 2.9-4.3cm
  - **WI (blade):** 5.4cm
  - **LE (loop):** 0.6-0.8cm
  - **Weight:** 325.7g
  - **Plate 17**
- **159. (14.) Copper alloy socketed axe (SF 14)**
  - **Type:** Sompting, Figheldean Down variant
  - **Description:** Complete. See description for No. 1**.**
  - **LE:** 13.1cm
  - **LE (mouth; back-front, inner-outer):** 2.5-4.2cm
  - **WI (mouth; inner-outer):** 3.2-4.3cm
  - **WI (blade):** 5.3cm
  - **LE (loop):** 0.65-1cm
  - **Weight:** 469.3g
  - **Plate 18**
- **160. (15.) Copper alloy socketed axe (SF 15)**
  - **Type:** Sompting**, , Figheldean Down variant**
  - **Description:** Complete. See description for No. 1.
  - **LE:** 13.25cm
  - **LE (mouth; back-front, inner-outer):** 2.5-4.2cm
  - **WI (mouth; inner-outer):** 2.9-4.3cm
  - **WI (blade):** 5.25cm
  - **LE (loop):** 0.6-0.9cm
  - **Weight:** 504.9g
  - **Plate 15**
- **161. (16.) Copper alloy socketed axe (SF 16)**
  - **Type:** Sompting/South Welsh Hybrid (?).
  - **Description:** Complete. Single mouth moulding. Rectangular/hexagonal mouth. Casting seams very pronounced and still present. Blade only a little expanded, sides meet at casting seams at an angle (thus hexagonal cross-section). Both faces decorated with five moulded ribs terminating in pellets. The two outermost ribs coincide with the face/side edge. Thick-walled, heavy implement. Similar to Late Bronze Age socketed axes of South Welsh/Stogursey type, but made with two-runner casting technique (not four like South Welsh Type).
  - **LE:** 11.6cm
  - **LE (mouth; back-front, inner-outer):** 2.1-3.7cm
  - **WI (mouth; inner-outer):** 3.5-4.9cm
  - **WI (blade):** 6cm
  - **LE (loop):** 0.6cm

        - **Weight:** 522.2g
        - **Plate 20**
    - **162. (17.) Copper alloy socketed axe (SF 17)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. See description for No. 1.
        - **LE:** 13.15cm
        - **LE (mouth; back-front, inner-outer):** 3.1-4.2cm
        - **WI (mouth; inner-outer):** 3.3-4.25cm
        - **WI (blade):** 5.3cm
        - **LE (loop):** 0.6-0.9cm
        - **Weight:** 455g
        - **Plate 18**
    - **163. (18.) Copper alloy socketed axe (SF 18)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. See description for No. 1.
        - **LE:** 13.2cm
        - **LE (mouth; back-front, inner-outer):** 2.7-4.2cm
        - **WI (mouth; inner-outer):** 3.1-4.3cm
        - **WI (blade):** 5.3cm
        - **LE (loop):** 0.5-1cm
        - **Weight:** 506.4g
        - **Plate 18**
    - **164. (19.) Copper alloy socketed axe (SF 19)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. See description for No. 1. Blade slightly damaged.
        - **LE:** 13.1cm
        - **LE (mouth; back-front, inner-outer):** 2.7-4.2cm
        - **WI (mouth; inner-outer):** 3-4.25cm
        - **WI (blade):** 5.1cm
        - **LE (loop):** 0.6-1cm
        - **Weight:** 503.9g
        - **Plate 17**
    - **165. (20.) Copper alloy socketed axe (SF 20)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. See description for No. 1. Socket filled with soil as well as small copper alloy fragments (possibly casting residue?).
        - **LE:** 13.2cm
        - **LE (mouth; back-front, inner-outer):** 2.7-4.2cm
        - **WI (mouth; inner-outer):** 3.2-4.3cm
        - **WI (blade):** 5.3cm
        - **LE (loop):** 0.6-1cm
        - **Weight:** 475.7g
        - **Plate 19**
    - **166. (21.) Copper alloy socketed axe (SF 21)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. See description for No. 1.
        - **LE:** 13cm

- **LE (mouth; back-front, inner-outer):** 2.9-4.2cm
- **WI (mouth; inner-outer):** 3-4.3cm
- **WI (blade):** 5.3cm
- **LE (loop):** 0.5-0.95cm
- **Weight:** 472g
- **Plate 17**

- **167. (22.) Copper alloy socketed axe (SF 22)**
  - **Type:** Sompting, Figheldean Down variant
  - **Description:** Complete. See description for No. 1. Blade shows signs of initial stages of re-working; i.e. hammer marks, but no pattern of wear.
  - **LE:** 13.1cm
  - **LE (mouth; back-front, inner-outer):** 2.9-4.3cm
  - **WI (mouth; inner-outer):** 3.2-4.3cm
  - **WI (blade):** 5.2cm
  - **LE (loop):** 0.6-1cm
  - **Weight:** 463.7g
  - **Plate 19**
- **168: (23.) Copper alloy socketed axe (SF 23)**
  - **Type:** Sompting, Figheldean Down variant
  - **Description:** Complete. See description for No. 1. Possibly fine horizontal striations on both faces close to cutting edge. Very heavy implement.
  - **LE:** 13.2cm
  - **LE (mouth; back-front, inner-outer):** 2.8-4.2cm
  - **WI (mouth; inner-outer):** 2.95-4.3cm
  - **WI (blade):** 5.3cm
  - **LE (loop):** 0.6-1cm
  - **Weight:** 529.6g
  - **Plate 20**
- **169: (24.) Copper alloy socketed axe (SF 3)**
  - **Type:** Sompting/South Welsh Hybrid (?).
  - **Description:** Complete. Single mouth moulding. Rectangular/hexagonal mouth. Casting seams very large and pronounced, still present. Blade only a little expanded, sides meet at casting seams at an angle (thus hexagonal cross-section). Loop very large. Both faces decorated with three moulded ribs terminating in pellets. There are no ribs that coincide with the face/side edge, but there may be pellets at the same height as the others on the face/side edge. Thick-walled, heavy implement. Similar to Late Bronze Age socketed axes of South Welsh/Stogursey type, but made with two-runner casting technique (not four like South Welsh Type).
  - **LE:** 13.8cm
  - **LE (mouth; back-front, inner-outer):** 2.8-4.2cm
  - **WI (mouth; inner-outer):** 4-5.3cm
  - **WI (blade):** 6.05cm
  - **LE (loop):** 0.65-0.65cm

        - **Weight:** 558.7g
        - **Plate 20**
    - **170. (25.) Copper alloy socketed axe (SF 25)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. See description for No. 1.
        - **LE:** 13.2cm
        - **LE (mouth; back-front, inner-outer):** 2.7-4.2cm
        - **WI (mouth; inner-outer):** 3-4.2cm
        - **WI (blade):** 5.3cm
        - **LE (loop):** 0.6-0.9cm
        - **Weight:** 482.8g
        - **Plate 18**
    - **171. (26.) Copper alloy socketed axe (SF 26)**
        - **Type:** Sompting/South Welsh Hybrid (?)
        - **Description:** Complete. Single mouth moulding. Rectangular/hexagonal mouth. Casting seams very pronounced and still present. Blade only a little expanded, sides meet at casting seams at a sharp angle (thus hexagonal cross-section). Both faces decorated with five moulded ribs terminating in pellets. The two outermost ribs coincide with the face/side edge. Thick-walled, heavy implement. Similar to Late Bronze Age socketed axes of South Welsh/Stogursey type, but made with two-runner casting technique (not four like South Welsh Type).
        - **LE:** 11.5cm
        - **LE (mouth; back-front, inner-outer):** 2.8-3.8cm
        - **WI (mouth; inner-outer):** 3.7-4.7cm
        - **WI (blade):** 6cm
        - **LE (loop):** 0.5-0.7cm
        - **Weight:** 486.5g
        - **Plate 18**
    - **172. (27.) Copper alloy socketed axe (SF 27)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. Double mouth moulding with bulbous upper and thinner lower mouth moulding. Square mouth with rounded corners. Small casting flaw (hole) near loop. Casting seams very thin and flattened at blade end. Blade only a little expanded, sides straight; the overall shape of the axe is ‘wedge-shaped’. Faces decorated with three plain moulded ribs. Light pitting at the centre of one facing during casting. Possibly fine horizontal striations on both faces close to cutting edge. Blade thinly cast.
        - **LE:** 13.1cm
        - **LE (mouth; back-front, inner-outer):** 2.5-3.2cm
        - **WI (mouth; inner-outer):** 3-4.3cm
        - **WI (blade):** 5.2cm
        - **LE (loop):** 0.6-0.9cm
        - **Weight:** 434.4g

        - **Plate 18**
    - **173. (28.) Copper alloy socketed axe (SF 28)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. Double mouth moulding with very bulbous upper and thinner lower mouth moulding. Square mouth with rounded corners. Casting seams very thin and flattened at blade end. Blade only a little expanded, sides straight; the overall shape of the axe is 'wedge-shaped'. Faces deco-rated with three plain moulded ribs. Possibly fine horizontal striations on both faces close to cutting edge.
        - **LE:** 13.5cm
        - **LE (mouth; back-front, inner-outer):** 2.7-4.2cm
        - **WI (mouth; inner-outer):** 3.1-4.4cm
        - **WI (blade):** 5.3cm
        - **LE (loop):** 0.7-1cm
        - **Weight:** 506.4g
        - **Plate 18**
    - **174. (29.) Copper alloy socketed axe (SF 29)**
        - **Type:** Sompting
        - **Description:** Complete. See description for No. 1.
        - **LE:** 13.2cm
        - **LE (mouth; back-front, inner-outer):** 2.7-4.3cm
        - **WI (mouth; inner-outer):** 3-4.3cm
        - **WI (blade):** 5.35cm
        - **LE (loop):** 0.65-1cm
        - **Weight:** 499.3g
        - **Plate 20**
    - **175. (30.) Copper alloy socketed axe (SF 30)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. See description for No. 1.
        - **LE:** 13.1cm
        - **LE (mouth; back-front, inner-outer):** 2.9-4.3cm
        - **WI (mouth; inner-outer):** 3.2-4.3cm
        - **WI (blade):** 5.3cm
        - **LE (loop):** 0.7-0.9cm
        - **Weight:** 531.1g
        - **Plate 18**
    - **176. (31.) Copper alloy socketed axe (SF 31)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. See description for No. 1. Possibly fine horizontal striations on both faces close to cutting edge. Light pitting on surface during casting.
        - **LE: 13.1cm**
        - **LE (mouth; back-front, inner-outer): 2.4-4.2cm**
        - **WI (mouth; inner-outer): 3.2-4.3cm**
        - **WI (blade): 5.3cm**
        - **LE (loop): 0.6-0.9cm**
        - **Weight: 499g**

        - **Plate 19**
    - **177. (32.) Copper alloy socketed axe (SF 32)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. See description for No. 1. Possibly fine horizontal striations on both faces close to cutting edge.
        - **LE:** 13.2cm
        - **LE (mouth; back-front, inner-outer):** 2.3-4.3cm
        - **WI (mouth; inner-outer):** 3.1-4.3cm
        - **WI (blade):** 5.3cm
        - **LE (loop):** 0.6-1cm
        - **Weight:** 461.7g
        - **Plate 19**
    - **178. (33.) Copper alloy socketed axe (SF 33)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. See description for No. 1.
        - **LE:** 13.2cm
        - **LE (mouth; back-front, inner-outer):** 2.4-4.2cm
        - **WI (mouth; inner-outer):** 3.2-4.2cm
        - **WI (blade):** 5.2cm
        - **LE (loop):** 0.65-0.9cm
        - **Weight:** 486.5g
        - **Plate 19**
    - **179. (34.) Copper alloy socketed axe (SF 35)**
        - **Type:** Sompting, Figheldean Down variant
        - **Description:** Complete. See description for No. 1.
        - **LE:** 13.2cm
        - **LE (mouth; back-front, inner-outer):** 2.9-4.2cm
        - **WI (mouth; inner-outer):** 3.2-4.3cm
        - **WI (blade):** 5.3cm
        - **LE (loop):** 0.6-0.9cm
        - **Weight:** 490g
        - **Plate 20**
    - **(35.) Casting Jet.** Complete. Found later than the hoard; added on October 4th/5th, 2005. Its relationship to the hoard is uncertain.
        - LE: 38mm WI: 24mm HE: 22mm WE: 46.7g
        - **Plate 21**
    - **(36.) Pottery vessel (by Stuart Needham).** A pottery vessel enclosing the hoard had broken in situ and much of the upper part was missing, probably having been dispersed by ploughing. It is likely that most or all of the lower body is present. A few sherds featuring the shoulder, neck and rim have survived and should allow a full profile of the vessel to be restored. The lower body wall flares moderately from a simple angle at the base (no protruding foot). The body probably rose almost straight to a weak shoulder, about 20mm above which is an obtusely angled neck with an internal bevel. The mouth then flares to a flattened rim. Overall the vessel is a coarse-ware shouldered jar with a weakly tripartite profile. There is no decoration present. The fabric is dark grey clay

tempered with large sub-angular rock pieces. Restored height would be at least 18cm and probably somewhat taller. Wall thickness 8-10mm. Rim thickness: 6-7mm.

- **Note:** The find was made by a metal detectorist on a north sloping field overlooking Mylor Creek and reported to A. Tyacke (FLO Cornwall). The axes had been deposited in a coarse ware pot and the site was excavated.
- **References:**
  - www.archaeologicalconsultancy.com/projects_mylorhoard.asp
  - Bruns and Needham 2008. Treasure Annual Report 2005/6, 50-52, no. 69.
- **Truro:** Royal Institute of Cornwall Museum (2005 T323)
- **Plates 15-21**

180. + 181. St Erth, Cornwall (centred on village: SW555355)

- **Axe Hoard**
- **Two copper alloy socketed axes**
- **Type:** Armorican
- **180. Copper alloy socketed axe (1)**
  - **LE:** 12cm
  - **WI (blade):** 4.6cm
  - **WI (socket, outer):** 3.8cm
  - **LE (socket, outer):** 4cm
- **181. Copper alloy socketed axe (2)**
  - **LE:** 12.7cm
  - **WI (blade):** 4.1cm
  - **WI (socket, outer):** 3.1cm
  - **LE (socket, outer):** 4cm
- **References:**
  - Hencken 1932, 88+296, fig. 24h.
  - Pearce 1983, nos. 44a and b, pl. 4.
- **Location:** Penzance Museum.

Single finds:

182. Barripper, Cornwall (centred on village: SW631382)

- **Copper alloy socketed axe fragment**
- **Type:** Armorican (Brandivy (?))
- **LE (remaining):** 13,1cm
- **WI (cutting edge): /**
- **WI (socket, inner-outer):** (ca.) 2,9-3,9cm
- **LE (socket, back-front, inner-outer):** /
- **WE:** 204,2g
- **Description:** Large fragment of a decorated cast copper alloy socketed looped axe. The surface is smooth and freckled with very small holes. The cutting edge and the loop are missing; the sides of the axe are almost parallel. The remaining face is decorated with 4 ribs (ca 5cm) ending in small pellets. They are

protruding from a high collar (ca 1cm), above which one can faintly recognise a thinner lower and a thicker upper mouth moulding. The remainders of the mouth betray that it was once almost square.
- **British Museum Register:** Greenwell Collection: "Bassipper, Cornwall"
- **References:** Unpublished.
- **London:** British Museum (WG 2429)

183. Breage, Cornwall (centred on village: SW615285)
- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:** Pearce 1983, no. 17.
- **Museum:** Uncertain

184. Falmouth, Cornwall (centred on parish: SW805325)
- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:** Pearce 1983, no. 51.
- **Location:** Uncertain

185. Gillan, Cornwall (centred on village: SW788247)
- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:** Pearce 1983, no. 3, pl. 1.
- **Cambridge:** University of Cambridge Museum of Anthropology and Archaeology (37/298)

186. Newlyn St Peter, Cornwall (centred on village: SW4629)
- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:** Pearce 1983, 421, no. 115.
- **Truro:** Royal Institute of Cornwall Museum

187. Mylor, Cornwall (from finder: SW81393519)
- **Copper alloy socketed axe**
- **Type:** Armorican, Variant Brandivy (?)
- **LE:** 13.65cm
- **WI (blade): 4.13cm**
- **WE: 460g**
- **Description:** A cast copper alloy looped socketed axe. The mouth is square and there is a side loop just below the mouth moulding. The axe has a straight-sided body and blade so that the axe looks rectangular face-on and triangular in section. Both faces of the axe are decorated with eight vertical ribs, running from the mouth down the length of the axe towards the blade end and ending in eight round pellets (one pellet per rib) a little more than half way down the axe. At the top end of the ribs are two mouldings running around the circumference/width of the axe which are a 10mm

apart from each other. There are casting flashes running the length of both sides. There is some damage to one face of the axe and to the cutting edge of the blade but it is hard to tell whether this is secondary to burial. The width of the socket is 31.8 mm and the depth of the socket is 29.5 mm; the width of the moulding around the socket is 43.3 mm and the width of the blade is 41.3 mm above the side loop and 33.4 mm below the side loop.
- **Note:** Discovered during agricultural or drainage work and reported to A. Tyacke, Finds Liaison Officer (Cornwall).
- **References:** www.finds.org.uk CORN-648E20
- **Returned to finder.**
- **Plate 22**

188. Penponds Camborne, Cornwall (centred on village: SW637390)
- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:** Pearce 1983, no. 24.
- **Location:** Uncertain

189. Penquite, Cornwall (centred on village: SX108750)
- **Copper alloy socketed axe**
- **Type:** Armorican
- **Note:** The entry in the Accession Register states: "Bronze socketed Celt, the loop broken; oblong mouth: type common in Northern France and sometimes found on our South Coast…"
- **References:** Anon 1919-20, 449.
- **Location:** Royal Inst. Cornwall (?)

190. "Cornwall"
- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:** Pearce 1983, 431, no. 170.
- **Location:** Royal Inst. of Cornwall

191. "Cornwall"
- **Copper alloy socketed axes**
- **Type:** uncertain (Armorican?)
- **Note:** Pearce suggests that these are 'Armorican' axes, but judging from her drawings, they are not Armorican axes.
- **References:** Pearce 1983, nos. 171 and 172.
- **Location:** Uncertain.

192. 'Cornwall'
- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill or Kingston variant
- **Note:** Pearce describes this axe as 'South Eastern', but her drawing strongly suggests it is a Sompting type axe, probably either Tower Hill or Kingston variant.

- **References:** Pearce 1983, 432, no. 180.
- **Location:** Penzance Museum.

Cumbria

Hoards:

193.-198. Skelmore Heads, Great Urswick, Cumbria (centred on Skelmore Heads: SD27427504)

- **Axe Hoard**
- **Type:** Sompting, Kingston and Tower Hill variants
- **Description:** Hoard of six cast copper alloy axes. In 1903, Harper-Gaythorpe reports: “In June, 1902, six bronze celts were found by a workman named James Newby while quarrying limestone in a field called Little Cow Close on Skelmore Heads, near Urswick, Furness. The celts were lying together in a fissure, about three inches wide, between two large blocks of limestone ; the root of an ash tree growing in the fissure bears an impression of one of the celts. The largest is 5 ins. long, and weighs 14ounces; the smallest is 4 ins. long, and weighs 10½oz. Two are quite plain; the other four are ornamented with ribs and pellets, one having a ring ornament not unlike Fig. 166 in Ancient Bronze Implements. All have the sockets wider at the bottom than in the middle, showing that a foxtail wedge was used to fix the handle. One of the ornamented specimens is not quite perfect; one of the others has been cracked across one face and has a hole near the loop, evidently a defect in casting ; another (at the top left- hand corner of plate opposite) has never been used since it came from the mould, the edge being one quarter of an inch thick. The site of the find is in view of the pre-historic "camps" at Foula, Appleby Slack, and Urswick Stone Walls. Bronze Age implements have also been discovered in Furness at Gleaston Castle (17761, Wraysholme Tower (1831), Longrigg Field, near the Stone Walls (1847), and Dalton (1874), and are described in these Transactions, vols, xiv., xv., and xvi. Five of the new find, in the possession of Mr. Robert Grisdale, Haverthwaite, have been photographed by Mr. Robert Dobson of Urswick ; and the sixth is in the possession of Mr. Thompson, General Burgoyne Inn, Urswick.” (Harper-Gaythorpe 1903, 310)

193. Skelmore Heads, Axe 1:

- **Type:** Sompting, Kingston variant
- **Length:** 130mm
- **Width (cutting edge):** 62mm
- **Width (socket, inner-outer):** 26mm
- **Length (socket, back-front, inner-outer):** 32mm
- **Weight:** 350g
- **Description:** Cast copper alloy socketed looped axe. Complete. The axe retains an untarnished dark brown patina and does

not show any damage or post-casting work. The casting seams may have been flattened to some extent, but the blade remains in as-cast condition. Each face it is decorated with two long hanging triangles ending in a circlet plus one long rib between them terminating in a circlet. There are two band-like mouldings just below the mouth moulding.

- **Note:** It is highly likely that this axe was made in the same mould or from the same mould template as Axes 1 and 2 from the Ulverston hoard (nos. 1395+1396) and a single find from Dunnichen, Tayside (no. 1245; Coles 1962, 67; Schmidt and Burgess 1981, no. 1585)
- **Reference:** Schmidt and Burgess 1981, no. 1580.
- **Barrow-in-Furness:** Dock Museum Acc. No. 07909
- **Plates 23 and 146**

194. Skelmore Heads, Axe 2:

- **Type:** Sompting, Kingston variant
- **Length:** 122mm
- **Width (cutting edge):** 68mm
- **Width (socket, outer):** 28mm
- **Length (socket, back-front, outer):** 32mm
- **Weight:** /
- **Description:** Cast copper alloy socketed looped axe. Dark green patina, very worn on one face, ridged face edges, cracked across the centre and bent, hammered blade. Both faces display different patterns: Three long-ribbed hanging triangles terminating in pellets are on one side. Also, there is an additional pellet/circle between the two ribs that make the central triangle. On the other face is only one central hanging triangle (again with a pellet/circlet between the ribs just below the mouth moulding) that is framed by two long ribs ending in pellets (Schmidt and Burgess 1981, no. 1598).
- **Reference:** Schmidt and Burgess 1981, no. 1598.
- **Lost (this axe was probably still available for study in the 1970s as Schmidt and Burgess must have seen it).**

195. Skelmore Heads, Axe 3:

- **Type:** Sompting, Tower Hill variant
- **Length:** 113mm
- **Width (blade):** 65mm
- **Width (socket, inner-outer):** 27-30mm
- **Length (socket, back-front, inner-outer):** 27-37mm
- **Weight:** 305g
- **Description:** Cast copper alloy socketed looped axe. Undecorated. The axe has a sub-rectangular (back-to-front) single mouth moulding and shows some signs of sharpening and use. The castings seams were smoothed down and the blade was hammered into a wide crescent/splayed shape and it was prepared for use. It is in excellent condition with a very smooth surface and a chocolate brown/green patina. There

are several smaller nicks and one large dent in the blade sections possibly suggesting intentional damage before deposition.

- **References:**
  - **a.** Davey and Foster 1975, 119.
  - **b.** Schmidt and Burgess 1981, no. 1613.
- **Private Possession: Mr David Parker, Lincolnshire; recorded on the PAS database under LANCUM-A9ECA6**

197. Skelmore Heads, Axe 4:

- **Type:** Sompting, Kingston variant
- **Length:** 112mm
- **Width (blade):** 61mm
- **Width (socket, outer):** 26mm
- **Length (socket, back-front, outer):** 30mm
- **Weight:** /
- **Description:** The axe bears a different decoration on each face: one face is decorated with four ribs forming an 'M'. The three corners of the 'M' are ornamented with a double-circlet and central pellet, while the two ends of the 'M' terminate in only a small pellet. On the other face is an upside-down 'V' and the corner as well as the two ends are decorated with a double-circlet with central pellet (Davey and Foster 1975, *frontispiece*).
- **Reference:** Schmidt and Burgess 1981, 1621.
- **Lost (this axe was still available for study in the 1960s and 1970s as Davey and Foster must have seen it).**

198. Skelmore Heads, Axe 6:

- **Type:** Sompting, Tower Hill variant
- **Length:** 103mm
- **Width (cutting edge):** 62mm
- **Width (socket, inner-outer):** 32.5-39.5mm
- **Length (socket, back-front, inner-outer):** 42-44mm
- **Weight:** 365g
- **Description:** Cast copper alloy socketed looped axe with double mouth moulding and decorated with four ribs ending in pellets on each side. The decoration is very worn. The axes shows clear signs of use and resharpening.
- **Note:** Gaythorpe stated that this axe was not undecorated and showed signs of wear/use (1903, 310). It is very likely that this axe is the shorter axe with thick upper mouth moulding and long-rib-and-pellet decoration on each face which was acquired and subsequently published by Cowper 1905, 181-2, fig. 2. It was, however, missing from Gaythorpe's initial note of discovery (1903, 310). Schmidt and Burgess included it as no. 1622 (Schmidt and Burgess 1981, no. 1622).
- **Reference:** Schmidt and Burgess 1981, 1622.

- **Lancaster:** Lancaster City Museum (ex. Swanson-Cowper Collection), currently on loan to the Ruskin Museum, Coniston (Cumbria).
- **Plate 24**

199. Skelmore Heads, Axe 5:

- **Type:** Sompting, Tower Hill variant
- **Length:** 114.4mm
- **Width (cutting edge):** 55.7mm
- **Width (socket, inner-outer):** 20.8-31.3mm
- **Length (socket, back-front, inner-outer):** 21.4-31.9mm
- **Weight:** 365g
- **Description:** Cast copper alloy looped socketed axehead. It is incomplete in so far as it is missing a corner of its cutting edge (old damage). The axe is undecorated and in very good condition. The axe has a square to sub-rectangular (back-to-front) mouth (31.9x31.3mm, internally 21.4x20.8mm; 80.5mm deep) with a prominent mouth moulding flanked by a shallower rib beneath. The side loop is circular and spurred at the bottom. There is a prominent casting seam running from the top of the mouth moulding to the cutting edge below. Another casting seam runs along the opposite side face of the axe. Both casting seams become less prominent and worn-down towards the expanded area of the cutting edge. The front and reverse faces of the axehead are gently expanding, flaring towards the cutting edge which has a shallow curve. There are hammer marks visible on both faces just before the cutting edge and further signs of lighter, transverse tooling at the cutting edge itself. The axehead has a shiny smooth patina, a very dark brown in colour. (PAS database entry, reference see below).
- It measures 114.4mm in length, max.55.7mm in width (at the cutting edge) and max.31.3mm in depth (at the socket end). The socket end, inclusive of loop, is 38.9mm wide. The body of the axe thins to 8.5mm thick just before the cutting edge expands. The axehead weighs 242g (to the nearest 2g).
- **Reference:** Schmidt and Burgess 1981, 1623.
- **Private Possession: Mr John Parker, Hampshire; recorded on PAS database under HAMP-5723E3**

  - **Note:** The axes were found lying together in a rock crevice
  - **References:**
    - Harper-Gaythorpe 1903a, 310.
    - Clough 1969, 19-20, fig. 6, 95-98 (two of the axes are not figured).
    - Schmidt and Burgess 1981, nos. 1580, 1598, 1613, 1621-23.
  - **Barrow-in-Furness:** Dock Museum, Register Entries: 5045.03 (Axe 1), 5045.02 (Axe 2), 5045.01 (Axe 4) and new accession number (Axe 1): 07909; **Lancaster:** Lancaster City Museum (ex

Swanson-Cowper Collection (Axe 5): currently on temporary display at the Ruskin Museum, Coniston (May 2012; the loan was renewed this year for five years)).

- **Plates 23, 24 and 146**

1395.-1397. Ulverston, Cumbria (SD26757535)

- **Axe Hoard**
- **Type:** Sompting, Kingston and Tower Hill variants
- **Three Cast copper alloy socketed looped axes**
- **1395. Cast copper alloy axe**
  - **Type:** Sompting, Kingston variant
  - **LE:** 13.5cm
  - **WI (cutting edge):** 6.65cm
  - **WI (socket, inner-outer):** 2.9-3.75cm
  - **LE (socket, back-front, inner-outer):** 3-4.15cm
  - **WE:** 333g
  - **Description:** Cast copper alloy looped socketed axe with long wedge-shaped body, somewhat splayed blade and back-to-front mouth moulding. The axe is complete and in good condition. It has a very smooth dark brown patina on both sides with some pitting in the upper and middle part of the body as well as larger patches of corrosion and some active bronze disease. The surface is smooth to the touch and the axe shows definite signs of wear: the casting seams were removed from the sides, blade and mouth and the blade was sharpened. Striations from sharpening and re-sharpening are clearly visible running parallel to the blade. The act of shaping and sharpening of the blade probably removed the above-mentioned surface pitting which is still clearly visible in the middle and upper part of the body. The axe has a thick mouth moulding and the socket is 'back-to-front' which means it is rectangular in shape, but not aligned with the blade. Below the thick mouth moulding are two clear decorative mouldings. Both faces are decorated with a clear rib-and-circlet pattern: Two hanging triangles (on the outside) with a single rib in the centre between them, with the rib and the tips of the triangles terminating in three pellets-in-circles.
  - **Note:** Possibly cast in the same mould or made from same mould template as axes nos. 1396 (Ulverston, Cumbria), 193 (Skelmore Heads, Cumbria) and 1245 (Dunnichen, Tayside)
  - **Reference:** www.finds.org.uk: LANCUM- 3F7550
  - **Plate 147**
- **1396. Cast copper alloy socketed looped axe**
  - **Type:** Sompting, Kingston variant
  - **LE:** 13.3cm
  - **WI (cutting edge):** 6.2cm

- **WI (socket, inner-outer):** 2.9-3.7cm
- **LE (socket, back-front, inner-outer):** 3.2-4.55cm
- **WE:** 378g
- **Description:** Heavy cast copper- (and/or high-tin-) alloy looped socketed axe with long wedge-shaped body, somewhat splayed blade and back-to-front mouth moulding. The axe is complete and in reasonable condition. It has a very rough surface on both sides with a dull silvery-grey patina shining through patches of corrosion and active bronze disease. The surfaces of the sides are especially rough and it seems that here, some of the original silvery surface has been replaced by corrosion and bronze disease. The axe shows no signs of wear at all; it is in as-cast condition. The casting seams are not very pronounced (except for around the mouth where they are very pronounced), but they are still intact. The blade has not been hammered, shaped or sharpened and it is still c. 5-6mm thick with the casting seam running along the centre. The axe has a thick mouth moulding and the socket is 'back-to-front' which means it is rectangular in shape, but not aligned with the blade. Below the thick mouth moulding may have possibly been another, shallower moulding, but this has been nearly obliterated by the surface corrosion. Both faces are decorated with the same rib-and-circlet pattern that is display by axe no. 1: Two hanging triangles (on the outside) with a single rib in the centre between them, with the rib and the tips of the triangles terminating in three pellets-in-circles.
- **Note:** Possibly cast in the same mould or made from same mould template as axes nos. 1395 (Ulverston, Cumbria), 193 (Skelmore Heads, Cumbria) and 1245 (Dunnichen, Tayside)
- **Reference:** www.finds.org.uk: LANCUM- 3F84C4
- **Plate 106 and 146**

- **1397. Cast copper alloy socketed looped axe**
  - **Type:** Sompting, Tower Hill
  - **LE:** 8.49cm
  - **WI (cutting edge):** 6.19cm
  - **WI (socket, inner-outer):** 2.3-3.4cm
  - **LE (socket, back-front, inner-outer):** 2.4-3.2cm
  - **WE:** 202g
  - **Description:** Cast copper alloy looped socketed axe with short, stocky body and widely splayed blade with curled up corners. The axe is complete and in poor condition. It has an extremely rough surface and it seems that none of the original surface survives. Only in the upper part of the axe, in a few very small spot, the original patina still shines through. It may possibly be of dark brown/golden

colour. However, the major part of the axe's surface shows active bronze disease and corrosion. The axe has a sub-rectangular (back-to-front) or square mouth with a thicker (and slightly miscast) upper mouth moulding and a thinner moulding underneath. The loop is semi-circular in shape. The axe appears to be undecorated.
        - **Reference:** www.finds.org.uk: LANCUM- 3F83A0
        - **Plate 147**
    - **Donated to the people of Furness by the finder and landowner; to be kept in the Dock Museum, Barrow-in-Furness.**
    - **Plates 106, 146 and 147**

Single finds:

199. Ainstable, Cumberland (centred on Glebelands: NY548442)
- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 11,1cm
- **WI (cutting edge):** 5,7cm
- **WI (socket, inner-outer):** 2,8-3,8cm
- **LE (socket, back-front, inner-outer):** 3-3,8cm
- **WE:** 306g
- **Description:** Cast copper alloy socketed looped axe with part of the socket missing. The axe has a square mouth and a double mouth moulding. The sides are parallel and the cutting edge is not much splayed. There are, however resharpening marks and signs of wear on the lower part of the blade. The mouth is incomplete. Both faces are decorated with three long ribs terminating in pellets-in-circlets.
- **Note:** The axe is was found in the Glebelands between Ainstable and the Nunnery, Kirkoswald.
- **References:**
    - Anon 1919, 165.
    - Fair 1946, 178, no. 6.
    - Schmidt and Burgess 1981, no. 1629.
- **Carlisle:** Tullie House Museum and Art Gallery: CALMG: 1918.4
- **Plate 24**

200. Cumbria (?)
- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant?
- **LE:** 12,4cm
- **WI (cutting edge):** 5,25cm
- **WI (socket, inner-outer):** 3,2-4,1cm
- **LE (socket, back-front, inner-outer):** 3,4-4,3cm
- **WE:** 354g

- **Description:** The axe is heavy and has a square double-mouth moulding. It is decorated with seven ribs on each face, four long and three short ones alternating on each face. All terminate in pellets.
- **Note:** The axe was donated to Penrith Museum by a Mr Mounsey (of Scaur Close, Lazonby, Penrith), who stated that the axes [*Note:* the others were stone axes] were given to him by a widow whose husband had died about a year ago, and may have been used in the Penrith school where he taught. Mr Mounsey surmised that they may have been borrowed from the old Penrith Museum.
- **References:** Richardson 1999, 3, fig. 2.
- **Penrith:** Penrith Museum Acc. No. PEQPM: 2003.3.1
- **Plate 25**

Derbyshire

Hoards: None

Single finds:

201. Brough, near Castleton, Derbyshire (centred on parish: SK185825)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **Description:** Socketed axe with rib-and-pellet decoration.
- **Note:** Evans only gives a description, but no figure. However, there is a drawing in Howarth's publication (1899, 86)
- **References:**
  - Evans 1881, 122.
  - Howarth, Catalogue of the Bateman Collection of Antiquities in the Sheffield Public Museum (1899), 86.
- **Sheffield:** Bateman Collection (J.93.509)

202. Peak Forest, Derbyshire (centred on parish: SK115795)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant (?)
- **Description:** Socketed axe with rib-and-pellet decoration.
- **Note:** Evans only gives a rough description, but no figure. There is, however, a rough drawing in Howarth's publication (1899, 80).
- **References:**
  - Evans 1881, 122.
  - Howarth, Catalogue of the Bateman Collection of Antiquities in the Sheffield Public Museum (1899), 85.
- **Sheffield:** Bateman Collection (J93.503).

1398. Mam Tor, Derbyshire (SK127836) –

- **Cast lead-alloy socketed axe**
- **Hillfort site**

- **Site:** Most of the finds from Mam Tor were ceramic (mainly of coarse vessels, buckets and globular pots). The smaller finds included flints, a stone axe, a whetstone, a shale bracelet and a cast lead-alloy socketed axe fragment from platform 4.
- **Description:** It is a much corroded fragment of one of the faces, but it seems to be one narrow form and decorated with three long ribs. These features are unusual for Yorkshire type or other ribbed Late Bronze Age socketed axe type. They are more common among the Early Iron Age corpus of socketed axes of Sompting type, Cardiff II or Figheldean Down variants.
- **Notes:** The site also produced two radio-carbon dates: 3130+/-132BP, cal. 1180bc (Birm-202, from platform 2) and 3080+/-115BP, cal. 1130bc (Birm-192, from platform 3), which seem to be too early for the Late Bronze Age/Early Iron Age transitional character of the site. Coombs and Thompson quote Coles and Jones who suggest that wood from aged trees could explain the anomaly (Coombs and Thompson 1979, 44).
- **References:**
  - Coombs and Thompson 1979, 7-52.
  - Guilbert 1996, 12-18.
- **Location:** Unknown.

203. "Derbyshire"

- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:** Vine 1982, 178.
- **Stoke-on-Trent:** Stoke Museum (K29-1977)

Devon:

Hoards: None

Single finds:

204. Chagford, Devon (from finder: SX70758814)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant (probably)
- **Description:** Large heavy Cast copper alloy socketed looped axe with thick up and thinner lower mouth moulding. The blade is widely splayed and appears to have been sharpened in the past. Both faces are decorated with four bundles of two ribs each, all four pairs terminating in a pellet surrounded by a circlet. It is very similar to the axe from Fordham, Cambridgeshire (no. 92) apart from it having 4x2 ribs instead 4x1.
- **References:** www.finds.org.uk DEV-8101B6
- **Returned to finder.**
- **Plate 25**

205. Cullompton, Devon (centred on parish: ST029068)

- **Copper alloy socketed axe**
- **Type:** Transitional/ possibly Sompting type, Figheldean Down variant
- **Description:** According to the drawing reproduced in Keene 1993, it is a fairly large and probably heavy, long, straight-sided implement which is decorated with two long ribs on (probably) each face. The blade is not much splayed and it looks like the axe has double-mouth moulding.
- **References:** Keene 1993, 15.
- **Exeter:** Royal Albert Memorial Museum

206. Haytor, Devon (centred on parish: SX768776)

- **Copper alloy socketed axe**
- **Type:** Armorican (small)
- **References:** Pearce 1983, 445, no. 252.
- **Private Possession**

207. Honiton, Devon (centred on parish: ST165005)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:** Pearce 1983, 444, no. 245.
- **Honiton:** Honiton Museum (unregistered)

208. Lovehayne, Devon (centred on parish: SY177924)

- **Copper alloy socketed axe**
- **Type:** Sompting type, Tower Hill variant (small)
- **Description:** Small cast copper alloy axe with definite sub-rectangular mouth and large triple mouth moulding which has not been smoothed down. The loop is small and the blade has been reworked to a wide, splayed form. The axe strongly resembles the small Sompting, Tower Hill variant axe from Llanmaes, Glamorgan (no. 1405).
- **Note:** As this is a very old discovery, its origin and context are somewhat ominous. It is reported to have been part of the 'Lovehayne Hoard' of socketed axes, all of which are now lost. There is no good reason to connect this axe to the hoard apart from the fact that, apparently, the axes from the Lovehayne Hoard had been brought into Honiton (where this axe has been discovered at a bookseller's who thought this might be where his axe had originated, too) to be melted down (for more details see Way 1869, 343).
- **References:** Way 1869, 343, fig. 2.
- **Location:** Private Possession (?) Lost (?)

209.-210a. Mountbatten, Plymouth, Devon (SX487533 / 465535) –

- **Prehistoric and Roman-British settlement**
- **Description:** The prehistoric finds from the promontory (and the surrounding area) include, e.g. two small Armorican type socketed

axes (nos. 209-210), a fragment of a Sompting type, Tower Hill variant axe (no 210a), several more mouth fragments which may have belonged to Sompting type axes (not individually numbered in this thesis; Cunliffe 1988, 45, fig. 30.5-9) fragments of knobbed bracelets, bow brooches (Early Iron Age as well as La Tène types), ring-headed and swan's-neck pins, a tanged sickle, fragments of socketed knives, two socketed gouges, one tanged chisel, sheet bronze vessel fragments, one ring (cauldron handle), one penannular armlet, four metal cakes, a double-edged blade and a trilobite arrowhead.

- **Notes:** Most of the finds have been recovered from a midden site on the tip of the promontory. The site has been much disturbed.

209. near Plymouth, possibly from Mountbatten, Devon (centred on Mountbatten: SX487533)

- **Copper alloy socketed axe**
- **Type:** Armorican (small)
- **References:** Pearce 1983, 451, no. 282.
- **Location:** Plymouth.

210. Plymouth, possibly Mountbatten, Devon (centred on Mountbatten: SX487533)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:** Pearce 1983, 451, no. 283.
- **Location:** Unknown.

210a. Plymouth, possibly Mountbatten, Devon (centred on Mountbatten: SX487533)

- **Copper alloy socketed axe**
- **Type:** Sompting, probably Tower Hill variant
- **References:** Cunliffe 1988, 53-54, fig. 30.2
- **Location:** Plymouth?

- **References:**
  - Clarke 1971, 137-162.
  - Gaskell Brown and Huge 1983, 69-75.
  - Pearce 1983, 450-451, no. 281.
  - Cunliffe 1988.
  - Gerloff 2010, 222, no. 65.
- **Location:** Plymouth.

Dorset

Hoards:

211. Blandford, Dorset (centred on parish: ST879064)

- **Axe Dominated Hoard**
- **Type:** Blandford
- **Description:** At least one socketed looped cast copper alloy axe and two socketed cast copper alloy gouges.
- **Note:**

        - The objects from Blandford may have been part of a greater hoard from the Blandford area of which the other material could be found in Mr. Medhurst's Collection (Weymouth) (Evans 1881, 127).
        - O'Connor mentions an additional axe in the Dorset County Museum (1902.129), almost identical to the BM one which also may be part of the above-mentioned hoard (O'Connor 1980, 419).
        - Pearce writes that there are three 'facetted' axes, one blade fragment of a socketed axe and two socketed gouges. Everything apart from one axe (which is, supposedly in the Dorset County Museum in Dorchester) is supposed to be in the British Museum, but I have only found three objects there (see below) and Pearce also only gives the British Museum Accession Number for three objects, not four (Pearce 1983, 465, no. 348). Due to lack of evidence there is only one running number (no. 211) for the one known socketed axe.
    - **References:**
        - Evans 1881, 127, fig. 146.
        - O'Connor 1980, 419, No. 214.
        - Pearce 1983, 465, no. 348.
        - Thomas 1989, 281.
        - Huth 1997, 273.
    - **London:** British Museum (68, 8-5, 8-10)
    - **Plates 25, 26, 93 and 94**

211. Copper alloy socketed axe

- **Type:** Blandford
- **London:** British Museum (68, 8-5, 8)
- **LE:** 9,9cm
- **WI (cutting edge):** 5,3cm
- **WI (socket, inner-outer):** 2,65-2,95cm
- **LE (socket, back-front, inner-outer):** 2,65-3,2cm
- **WE:** 108,9g
- **Description:** Socketed looped cast copper alloy axe. Very smooth with dull green metal patina which is speckled with bright orange, dull white and green flecks. The axe is roughly triangular in shape and has a sub-rectangular double-mouth moulding. It was found in as-cast condition. The axe's walls are thinly cast and the faces are decorated with two thick ribs which run parallel along the edges of the face. They are ca. 4cm long. This axe is somewhat reminiscent of linear-decorated axes.
- **Plates 25, 26, 93 and 94**

Copper alloy socketed gouge (1)

- **London:** British Museum (68, 8-5, 9)
- **LE:** 7cm
- **WI (cutting edge):** 1,2cm
- **Diameter (inner-outer):** 1,3-1,5cm
- **WE:** 32,3g

- **Description:** Socketed cast copper alloy gouge found in as-cast condition. It is dark brown-reddish speckled with white and ochre flecks, has a small mouth moulding.

Copper alloy socketed gouge (2)

- **London:** British Museum (68, 8-10, 10)
- **LE:** 7,8cm
- **WI (cutting edge):** just under 1cm
- **Diameter (inner-outer):** 1,45-1,55cm
- **WE:** 32,3g
- **Description:** Socketed cast copper alloy tool, similar to a gouge, but with a finer, less curved and flatter blade. The tool was found in as-cast condition and has a shiny dark silver surface speckled with some flecks of green and white.

212. -218. Eggardon, Dorset (centred on south-west of hillfort: SY542945)

- **Axe Hoard**
- **Type:** Armorican (?)
- **Note:**
  - Citing Pearce 1976 (no page), Thomas describes: „Seven Armorican Axes, found a little to the south-west of Eggardon hillfort".
- **References:** Thomas 1989, 281
- **Location:** Uncertain

219.-225. Eggardon Hill, Askerswell, Dorset (centred on tumuli south west of hillfort: SY55189445)

- **Axe Hoard**
- **Type:** Portland
- **Description:** Seven cast copper alloy socketed looped axe with rib-and-pellet decoration. Probably Portland type axes.
- **Note:** "Found by stone-diggers in 1882 on site which may be a mutilated barrow. The mound also produced a flint scraper and 'well-burnt' British pottery. The barrow is S/W of Eggardon hillfort." (Pearce 1983, 462)
- **References:**
  - Moule 1900, 53.
  - Pearce 1983, no. 336, 462.
  - Huth 1997, 273.
- **Location:** Dorchester: Dorset County Museum (1 axe); and Bridport (6 axes)

226. - 598. Langton Matravers, Dorset (SZ0017578515 and SZ00187853)

- **Axe Hoard**
- **Type:** Portland
- **References:** Roberts *et al* 2015.
- **Circa 373 intact socketed axes (2007 T624 (304 axes and axe fragments) and 2007 T640 (197 axes and axe fragments)):**

complete and near-complete axes were given consecutive numbers, axe fragments (total number = 48) which may belong to any of the axes were not numbered, i.e. 373 consecutive numbers were given as the smallest possible number of axes deposited in four pits at above grid references (real number likely to be higher).
- **Acquired by Dorset County Museum Service, Dorchester.**
- **Measurements and weights of all axes and fragments can be found in the Appendix (CD ROM)**
- **Plates 26 and 27**

599.-609. Portland, Dorset (SY690720)
- **Axe Hoard**
- **Type:** Portland

599. Copper alloy socketed axe (1)
- **Type:** Portland
- **LE:** 10,1cm
- **Note:** (Left with axe) “From the Isle of Portland, Dorset – one of eleven axes found 10 April 1857, Nat. Grid. SY6972”
- **Acquired:** Purchased from Lt.-Col. Hardman 1923
- **Description: “**Six-sided; expanding towards cutting edge; decorated on main faces with three pendulums; containing high percentage of tin.”
- **Museum:** Bristol Museum & Art Gallery (F859, Display D68f) (axe could not be taken off display at time of visit)

600. Copper alloy socketed axe (2)
- **Type:** Portland
- **LE:** 10,2cm
- **WI (uncertain, as damaged):** 4,5cm(?)
- **WI (socket, inner-outer):** 2,7-3,0cm
- **LE (socket, back-front, inner-outer):** 2,8-3,2cm
- **WE:** 90,8g
- **Description:** Cast copper alloy socketed looped axe of Portland type with damaged cutting edge: one corner and part of the body of the axe are missing, but there is still enough of the blade left to see that is was sharpened in more recent times, but probably not used. The sharpened cutting edge is of shiny golden colour, but the overall patina is silvery with a thick layer of muddy-green and white corrosion with bright red and white flecks. The wall of the body is 0,2cm thick and the wall near the cutting edge is 0,15cm thick. There appears to be some metal fragments jammed inside the socket. The fragments are very small and one would hardly recognise them if the axe was not damaged. The axe is decorated with three ribs terminating in pellets on either side (5,2 and 5,4cm) and another four ribs, each between the edge of one of the two faces and the casting seam. The collar and mouth moulding are fairly high and thick, but there is no smaller second mouth moulding underneath.
- **London:** British Museum (WG 2430)
- **British Museum WG Register:** “Portland, Dorset (cf. 1985-86)”

- **Plate 27**

601. Copper alloy socketed axe (3)

- **Type:** Portland
- **LE:** 10cm
- **WI (cutting edge):** 4,2cm
- **WI (socket, inner-outer):** 2,4-2,7cm
- **LE (socket, back-front, inner-outer):** 2,4-2,75cm
- **WE:** 108,3g
- **Description:** Complete Cast copper alloy socketed looped axe with dark silver patina which is spoilt in several places by patches of a thick layer of green and light grey corrosion. The axe has a sub-rectangular single upper mouth moulding. It is decorated with three ribs terminating in pellets (4,8-4,9cm in length) on both faces and another four ribs – each between casting seam and edge of face which run down to a point just above the corners of the cutting edge.
- **Note:** Possibly one half of the axe (loop to the right) could have been made in the same mould or from the same mould template as the identical half of axe "JG5" from the Netherhampton (Wiltshire) hoard (no. 1072).
- **London:** British Museum (WG 1985)
- **British Museum WG Register:** "D(?), Portland"
- **Plates 27 and 98**

602. Copper alloy socketed axe (4)

- **Type:** Portland
- **LE:** 10,2cm
- **WI (cutting edge):** 4,9cm
- **WI (socket, inner-outer):** 2,7-3,0cm
- **LE (socket, back-front, inner-outer):** 2,3-2,95cm
- **WE:** 106,8g
- **Description:** Complete cast copper alloy socketed looped axe. Dark shiny silver surface interrupted by larger patches of dark grey patina with red, green and white flecks. The loop is unusually large and the axe is decorated with three ribs ending in pellets (5,7-5,8cm) and another four ribs, each between an edge of a face and the casting seam. They terminate in the outer pellets of the faces' decoration.
- **London:** British Museum (WG1986)
- **British Museum WG Register:** no entry (below WG 1985).
- **Plate 27**

603. Copper alloy socketed axe (5)

- **Type:** Portland
- **LE:** 9,8cm
- **WI (cutting edge):** 4,2cm
- **WI (socket, inner-outer):** 2,2-2,6cm
- **LE (socket, back-front, inner-outer):** 2,5-2,9cm
- **WE:** 101,94g
- **Description:** Cast copper alloy socketed looped axe with cracked surface and dark grey/silver patina. The silvery colour suggests a

tin-enriched surface. About ¾ of the axe's socket shows a double mouth moulding, but ¼ has only a single mouth moulding. The socket is sub-rectangular, but it is slightly misshapen, suggesting that the two halves of the mould did not fit or were not aligned properly during the casting process. The axe is decorated with three ribs (5,7cm on one side and 5,3cm on the other) terminating in pellets on both faces, and there are no additional ribs. The central rib on one face was extended over the pellet - perhaps to look longer and fit the length of the other rib? However, the edges of one face seem slightly more enhanced by a very faint 'rib' while the edges of the other face are slightly rounded. The axe is in as-cast condition with some of the casting seams still surviving.

- **Salisbury:** Salisbury Museum, Pitt Rivers Collection 2J20
- **Plate 28 and 29**

604. Copper alloy socketed axe (6)

- **Type:** Portland
- **LE:** 10,6cm
- **WI (cutting edge):** 4,3cm
- **WI (socket, inner-outer):** 2,4-3,0cm
- **LE (socket, back-front, inner-outer):** 2,3-2,9cm
- **WE:** 127,64g
- **Description:** Cast copper alloy socketed looped axe with cracked surface and reddish/green patina, bright silver shining through. This suggests a tin-enriched surface. The axe has a single mouth moulding around an only slightly sub-rectangular socket. The axe was discovered in as-cast condition. The decoration is obstructed by the flaky patina, but it seems that is only had one rib (5,0-5,1cm) terminating in a pellet on each face, while there are another four ribs enhancing the edges of the two faces and four additional ribs, each of them between the edge and the casting seam. They do not meet in the corner of the cutting edge, but at a point somewhat further up, ca. 2cm from the corner of the blade).
- **Salisbury:** Salisbury Museum, Pitt Rivers Collection 2J21
- **Note:** This axe has a very old label inside the socket: "So[ckete]d Axe, Por[tland] Island, bought at [So]therby's sale Nov 3, [R]obinson Collection 1890, [Lo]t 52"
- **Plate 28 and 29**

605. Copper alloy socketed axe (7)

- **Type:** Portland
- **LE:** 10,3cm
- **WI (cutting edge):** 4,8cm
- **WI (socket, inner-outer):** 2,6-3,0cm
- **LE (socket, back-front, inner-outer):** 3,0-3,3g
- **WE:** 109,43g
- **Description:** Cast copper alloy socketed looped axe with cracked surface and reddish-green patina with silver shining through, suggesting a tin-enriched surface. The axe has a slightly funnel-shaped mouth with a single mouth moulding. It is decorated with three ribs (4,4-4,5cm) terminating in pellets on each face. There

are a further four ribs between the faces' edges and the casting seams at the sides. There are some minor casting flaws in the casting of the ribs suggesting that the mould may have been used previously. The casting seams have been removed and the blade looks shinier than the rest of the axe, but there are not obvious signs of usage and re-sharpening marks.

- **Salisbury:** Salisbury Museum, Pitt Rivers Collection 2J23
- **Plate 28 and 29**

606. Copper alloy socketed axe (8)

- **Type:** Portland
- **LE:** 10,5cm
- **WI (cutting edge):** 4,6cm
- **WI (socket, inner-outer):** 2,4-2,9cm
- **LE (socket, back-front, inner-outer):** 2,6-3,2cm
- **WE:** 113,95g
- **Description:** Cast copper alloy socketed looped axe with reddish silvery patina suggesting a tin-enriched surface. The axe has a thick single mouth moulding, aligned with the blade. The axe's faces are decorated with three crude ribs (5,2-5,4cm) terminating in very small crude pellets. In contrast to the other axes, this one has no slightly rounded body, but a true rectangular body shape. The blade was broken off in antiquity and has been reattached since. The axe's casting seams are still intact along the sides, but they have been taken off the blade and socket and the blade was possibly crudely sharpened in more recent times. The walls of the axe are very thinly cast.
- **Salisbury:** Salisbury Museum, Pitt Rivers Collection 2J22
- **Note:** This axe has also an old label in its socket: 'Socketed Axe, Portland Island, Sotheby's S[a]le [April] 3. Robinson Collect. Lot 52, 1890.'
- **Plate 28 and 29**

607. Copper alloy socketed axe (9)

- **Type:** Portland
- **References:**
  - Pearce, S.M. 1983, p. 479, no. 433.
  - Thomas, R. 1989, p. 282
  - Huth, C. 1997, p. 274.
- **Note:** Unfortunately, the axe was inaccessible at the time of the visit.
- **Oxford:** Ashmolean Museum (1937.2669)

610.-617. Thorneydown Farm, Sixpenny Handley, Dorset (ST990153)

- **Axe Dominated Hoard**
- **Type:** Portland or Blandford
- **Description:** 8 socketed axes and 5 socketed gouges (+ one axe; new discovery)
- **Note:**
  - O'Connor suggested that four of the axes and four of the gouges came from the same mould. However, this cannot

be verified because there are only paper records available in the Dorset County Museum in Dorchester, but the hoard itself (O'Connor 1980, 419).

- Pearce states that there are six socketed axes (likely to be Blandford type, as she describes them as facetted, not rib-and-pellet decorated), one blade fragment and five socketed gouges (two of them unfinished, two sharpened), but she also says that "different accounts give differing numbers of pieces, but agree that there were at least three axes and two gouges" (Pearce 1983, 474). The British Museum card catalogue suggests that four of each survive, also stating that the gouges were found inside the axes.
- O'Connor publishes an additional axe (the eighth) for the first time in 2007. It was found "in a box in the outside privy to No 2 Down Farm Cottages [possibly SU102198] (Martin Green *in litt*.) and is in a private collection. The axe is complete except for the blade tips; original patina preserved with green patina and patches of corrosion. Irregular round mouth with indistinct collar moulding; shallow loop with narrow perforation. Trapezoidal blade, sub-rectangular section, thin walls. Two diverging ribs on each face, slight traces of ribs on angles. Casting seams preserved; edge eroded, but no sign of sharpening or working […] This axe resembles so closely two of those in the Thorney Down hoard (Dorset County Museum (1933, 14.2; 1952, 36.1)) that it must have come from the same model or mould."
- **LE:** 9,7cm
- **WE (blade):** 4.8cm

- **References:**
  - Farrar 1952, 109.
  - O'Connor 1980, 419, no. 216.
  - Pearce 1983, 474, no. 407.
  - Thomas 1989, 282.
  - Huth 1997, 274.
- **Dorchester:** Dorset County Museum (1933, 14.1-4; 1952, 36.1-8))

618.-635. Tincleton, Puddletown, Dorset (SY74389127)

- **Axe Hoard**
- **Type:** Portland
- **Description:** Small hoard of 18 Portland type axes of which only 6 survive.
- **References:** Hooker, J 2009. A memorandum on the discovery, composition and the location (in Puddletown parish) of the Tincleton Axe Hoard, unpublished.
- **Dorchester:** Dorset County Museum, Archaeological Archives (1990.64.7)

636.+637. near Weymouth, Dorset (centred on town: SY675795)

- **Axe Hoard**
- **Type:** Portland
- **636. Copper alloy socketed axe (1)**
  - **Oxford:** Ashmolean Museum (1927/2626)
  - **LE:** 10.3cm
  - **WI (blade):** 4.6cm
  - **WI (socket, inner-outer):** 2.2-2.6cm
  - **LE (socket, back-front, inner-outer):** 2.4-2.5cm
  - **WE:** 109g
  - **Description:** Very light, tinny copper alloy axe with three ribs terminating in pellets on each face.
- **637. Copper alloy socketed axe (2)**
  - **Oxford:** Ashmolean Museum (1927/2627)
  - **LE:** 10.2cm
  - **WI (blade):** 4.3cm
  - **WI (socket, inner-outer):** 2.1-2.5cm
  - **LE (socket, back-front, inner-outer):** 2.8-3.4cm
  - **WE:** 120g.
  - **Description:** Very light, tinny copper alloy axe with three ribs terminating in pellets on each face.
- **References:**
  - Pearce 1983, 487, no. 478.
  - Huth 1997, 274.
- **Oxford:** Ashmolean Museum (1927/2626 and 1927/2627)
- **Plate 30**

Add: 1398.-1400. Preston Down, Jordan Hill, Weymouth, Dorset (SY699824)

- **Prehistoric site/possibly settlement site**
- **Description:** The finds described were chance finds made over a period of years. They include a socketed axe (see below), two bronze spearheads, a copper alloy pin and a penannular armlet with sub-rectangular cross-section.
- **Copper alloy axe(s):**
  - **Type:** Portland
  - **Notes:** Moule reports that there were three such socketed axes from Jordan Hill – he described them as matching the ones from the Eggardon Hoard (see above) (Moule 1900, 53).
  - **References:**
    - Dunning 1934, 270, fig. 3.3.
    - Moule 1900, 40-105.
    - O'Connor 1980, 598, List 251, no. 2.
    - Pearce 1976, 30.
    - Pearce 1983, 488, no. 487, 489.
- **Dorchester: Dorset County Museum and London: British Museum.** Socketed axe: Warne collection. Decorated spearhead:

Dorset County Museum 1885/16/4. Swan's neck pin: British Museum

Single finds:

638. Bradpole, Dorset (centred on town: SY484947)

- **Copper alloy socketed axe**
- **Type:** Portland (?)
- **Description:** The axe has a sub-rectangular mouth and a single mouth moulding. It is decorated with three ribs terminating in pellets on each face. The description of the find note for this axe also included its measurements (LE: 3¼ inch (ca. 8,4cm), WI (socket, outer): 1¾ inch (ca. 4,5cm, which, however, seems too much for such a small axe and might be a faulty measurement) and WI (cutting edge): 2 inch (ca. 5,1cm)).
- **Note:** The decoration and length of the axe as well as the width of the cutting edge suggest that it is a Portland type axe.
- **References:** Farrar 1960, 85.
- **Dorchester:** Dorset County Museum (Loan)

639. Isle of Portland, Dorset (centred on parish: SY692719)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:** Pearce 1983, 480, no. 435.
- **Dorchester:** Dorset County Museum

640. Melcombe Horsey, Dorset (centred on village: ST749028)

- **Stone mould**
- **Type:** Mould
- **Description:** One half of a stone mould, possibly for casting socketed axes of Blandford type.
- **Note:**
  - According to Pearce, this mould is a bivalve mould, with four dowel holes, to make a socketed axe with ten facets (Pearce 1983, 477).
  - Hodges presents a stone mould from 'Milton, Dorset' in his article (reference below), but he does not elaborate the find spot or find circumstances. However, as there are so few moulds, it is very likely that the moulds from 'Melcombe Horsey' and 'Milton' are one and the same.
- **References:**
  - Hodges 1960, pl. IIIA.
  - O'Connor 1980, 538, List 227, 7.
  - Pearce 1983, 477, no. 419.
- **Dorchester:** Dorset County Museum (1902/1/9)
- **Plate 30**

641. Milborne St Andrews, Dorset (centred on town: SY805975)

- **Copper alloy socketed axe**
- **Type:** Transitional or Sompting, Cardiff II variant?
- **Note:** Pearce argues that this is a Sompting type axe, but her drawing suggests that it is a transitional axe with rib-and-pellet decoration
- **References:**
  - Moule 1900, 53.
  - Pearce 1983, 477, no. 421.
- **Dorchester:** Dorset County Museum (1884/8/1)

642. Wareham, Dorset (centred on parish: SY925875)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:** Pearce 1983, no. 467.
- **Dorchester:** Dorset County Museum

643. Wareham, Dorset (centred on parish: SY925875)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **LE:** 11.6cm
- **WI (blade):** ca. 3cm
- **WI (socket, inner-outer):** 2.5-3.2cm
- **LE (socket, back-front, inner-outer):** 2.8-4.0cm
- **WE:** 186g
- **Description:** Damaged and very corroded copper alloy axe of Armorican type.
- **References:** Unpublished.
- **Oxford:** Ashmolean Museum (1927.2670)
- **Plate 30**

644. "Dorset"

- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:** Pearce 1983, 498, no. 551.
- **Dorchester:** Dorset County Museum (1884/2/7)

645. "Dorset"

- **Copper alloy socketed axe**
- **Type:** Transitional (probably linear-facetted)
- **References:** Pearce 1983, 498, no. 554.
- **Dorchester:** Dorset County Museum.

646. "Dorset"

- **Copper alloy socketed axe**
- **Type:** Portland
- **References:** Pearce 1983, 498, no. 555.
- **St Albans:** St Albans Museum

647. ?Dorset

- **Copper alloy socketed axe**
- **Type:** Portland
- **LE:** 11.3cm
- **WI (blade):** 4.85cm
- **WI (socket, inner-outer):** 2.3-2.7cm
- **LE (socket, back-front, inner-outer):** 2.3-3.0cm
- **WE:** 112.5g
- **Description:** Very light, tinny cast copper alloy axe of Portland type, but plain ribbed instead of rib-and-pellet decoration.
- **References:** Pearce 1983, 498, no. 560.
- **Oxford:** Ashmolean Museum (1927/2628)
- **Plate 31**

East Sussex

Hoards:

648. +649. West side of Terminus Rd, Eastbourne, East Sussex (centred on west side of Terminus Rd: TV612990)

- **Axe Hoard**
- **Type:** Transitional (1) and Sompting type, Kingston variant (1)
- **Description:** Small hoard of two socketed axes:
  - **648: Cast copper alloy socketed looped axe**
    - **Type:** Transitional
    - **Description:** The smaller of the two socketed axes is undecorated and has a single thick mouth moulding with two parallel ribs below it. The loop is small and the sides are fairly straight with a splayed cutting edge. Its corners are turned upwards and rounded. The edges of the faces carry an additional groove.
    - **Note:** O'Connor suggests that this is an axe of Schmidt and Burgess' Beddlestead Green variant (2007, 76).
  - **649: Cast copper alloy socketed looped axe**
    - **Type:** Sompting, Kingston variant
    - **Description:** The bigger axe has a thick upper mouth moulding and one, possibly two, more shallow mouth mouldings underneath. The sides are almost straight and the cutting edge is not much splayed. The decoration seems is different on each face, but unfortunately, only one face is shown and described in Budgen's account. One of the faces carries an ornament of three small dots-in-circlets just below the third (second) mouth moulding. From each circlet runs a rib down the face of the axe, terminating in another dot surrounded by a circlet. From the four outer circlets four additional ribs reach into the centre of the face to touch the central rib. Between these pairs, however, is a gap and they do not touch each other.
- **References:**

  - Budgen 1920, 143-144.
  - Grinsell 1931, 60, E10.
  - Huth 1997, 274.
  - O'Connor 2007, no. 21.
- **Private Possession (Eastbourne?).**

Single finds: none

Essex:

Hoards:

650.-664. Dovercourt, Essex (centred on parish: TM255315)

- **Axe hoard**
- **Type:** Transitional
- **Description:** Hoard of fifteen socketed axes, plain and ribbed.
- **Note:** Butcher does not offer an illustration of this hoard, but its composition of only socketed axes suggests that it dates from the very end of the Late Bronze Age or beginning of the Earliest Iron Age, even though the socketed axes are of Late Bronze Age types (e.g. facetted axes, ribbed and plain South Eastern axes).
- **References:** Butcher 1923, 261
- **Colchester:** Colchester Museum (2347.11)

Single finds:

665. Sheepen Farm, Colchester, Essex (TL988259)

- **Iron socketed axe**
- **Type:** Iron socketed axe
- **Note:** From a period VI deposit on site A1 of the 1930-9 excavations. From the same site comes the Class A1 cauldron discussed by Hawkes and Smith 1957, 160-2.
- **References:** Manning and Saunders 1972, 283.
- **Colchester:** Colchester Museum

666. Lea Marshes, Walthamstow, Essex (centred on reservoir: TQ349878)

- **Copper alloy socketed axe**
- **Type:** Sompting type, Tower Hill variant
- **LE:** 12,6cm
- **WI (cutting edge):** 6,3cm
- **WI (socket, inner-outer):** 2,8-3,8cm
- **LE (socket, back-front, inner-outer):** 3,2-4,2cm
- **WE:** 463,8g
- **Description:** Socketed looped cast copper alloy axe of bright golden colour with a rough surface and a dark brown/black spotted patina on one face and a metallic-shiny patina on the other. The axe possesses a sub-rectangular double mouth

moulding with a large upper and a thinner lower moulding. The loop is round and of medium-width, but there is a unique decoration of 4 horizontal grooves just underneath it (comp. drawing). The axe's faces are decorated with somewhat washed-out/faded thin ribs and pellets encircled with thin circlets: there is a row of three pellets, each encircled by two smaller circlets, just below the lower mouth moulding. Five thin ribs of ca. 4,8cm length connect the central encircled pellet with another, bigger pellet-encircled-by-two-circlets in the centre of the axe's face. The same pattern, only with three thin ribs, is repeated on the two outer circlets (compare drawing).

- **References:** Trustees of the British Museum 1953, 26, fig. 7.6.
- **London:** British Museum (WG 1742)
- **British Museum Register, Greenwell Collection: "Reservoir, Lea marshes (?), Walthamstow"**
- **Plate 31**

667. Walthamstow, Essex (centred on parish: TQ356889)

- **Iron socketed axe**
- **Type:** Iron socketed axe
- **Note:** Exact provenance and circumstances of discovery not recorded.
- **References:**
  - British Museum Iron Age Guide 1925, 87, fig. 82.
  - Rainbow 1928, no. 2.
  - Manning and Saunders 1972, 283.
- **London:** British Museum (82, 4-24, 6)

<u>Gloucestershire:</u>

Hoards: none

Single finds:

668. Near Cirencester, Gloucestershire (centred on parish: SP025015)

- **Copper alloy socketed axe**
- **Type:** Sompting type, Kingston variant
- **LE:** 10cm
- **WI (blade):** 5.3cm
- **WI (socket, inner-outer):** 2.3-3.4cm
- **LE (socket, back-front, inner-outer):** 2.7-3.7cm
- **WE:** 261g
- **Description:** Socketed looped cast copper alloy axe with sub-rectangular socket, double mouth moulding and a splayed cutting edge. Both faces are decorated with different yet similar patterns: in the centre of the faces, very close together, are two ribs which terminate in small pellets at both ends. There is an additional rib of half the length, placed diagonally between the ribs and the edges

of the faces. On one face the decoration looks like \II/, on the other /II\.
- **References:** Unpublished.
- **Oxford:** Ashmolean Museum (1927.2633)
- **Plate 31**

Greater London (Middlesex)

Hoards: none

Single finds:

669. near Old Kent Rd, London (centred on Old Kent Rd: TQ340781)
- **Copper alloy socketed axe**
- **Type:** Sompting type, Figheldean Down variant
- **LE:** 13,2cm
- **WI (cutting edge):** 4,8cm
- **WI (socket, inner-outer):** 3,2-4,15cm
- **LE (socket, back-front, inner-outer):** 3,5-4,55cm
- **WE:** 407,2g
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration. The patina is of patchy turquoise/golden/reddish colour, speckled with white flecks. The axe has a thick single sub-rectangular mouth moulding. Its blade is blunt now, but it has defined re-sharpening marks along the cutting edge. The loop is comparatively small and not splayed. The casting seams have been smoothed down. The axe bears the same decoration on both faces, although the execution is different. The pattern is the basic rib-and-pellet décor, but there is an additional pellet at the top of the each rib, just below the single mouth moulding. It is of the same size as the pellets at the lower part of the ribs. However, the pellets on one face are much thicker (5,5-6mm (diameter)) than on the other face (3-4cm (diameter)), and there is an insignificant difference in the length of the ribs: (5,3-5,5cm on the face with the smaller pellets and 5,5-5,8cm on the other face).
- **British Museum Register, Greenwell Collection:** “Near Old Kent Road, London”
- **References:** Unpublished.
- **London:** British Museum (WG 1744)
- **Plate 31**

670. River Thames at Kew, Middlesex (estimate: TQ189780)
- **Copper alloy socketed axe**
- **Type:** Sompting type, Tower Hill variant
- **LE:** 13,5cm
- **WI (cutting edge):** 6,7cm
- **WI (socket, inner-outer):** 2,7-3,55cm

- **LE (socket, back-front, inner-outer):** 2,8-4,0cm
- **WE:** 489,2g
- **Description:** Cast copper alloy socketed looped axe of shiny coppery colour speckled with white and black patches of patina. The axe has a sub-rectangular double mouth moulding with a thick and well defined upper mouth moulding and a shallower, on one face hardly recognisable, lower mouth moulding. The axe possesses a rough surface and the casting seams have only been smoothed down at their lower ends. The cutting edge has been hammered into semi-circular shape and it displays clear signs of wear (use and re-sharpening). The axe is not decorated and resembles NMS: X.DE135. Also, some wood remains inside the socket.
- **British Museum Register, Greenwell Collection:** "Thames, Kew"
- **References:** Unpublished.
- **London:** British Museum (WG 1741)
- **Plate 32**

671. (River Thames) "near Kew" (estimate: TQ189780)

- **Copper alloy socketed axe**
- **Type:** Transitional (linear-facetted)
- **LE:** 11,7cm
- **WI (cutting edge):** 5,4cm
- **WI (socket, inner-outer):** 2,5-3,15cm
- **LE (socket, back-front, inner-outer):** 2,65-3,2cm
- **WE:** 193,506g
- **Description:** Cast copper alloy socketed looped facetted axe. The axe has a dark brown-reddish patina, which is flaking off in places revealing a light turquoise surface underneath. The axe has a round-oval mouth with a double mouth moulding and very thin concave collar between them. The loop is small and undamaged and the casting seams (which probably were very thin to start with) have now been smoothed down leaving the sides of the axe very smooth to the touch. The axe has eight evenly spaced facets (including faces and the sides), the edges of which are enhanced by ribs. Also, the face- and side-facets seem to 'stand out' more than the other four facets. The ribs are curved and continue down to the corners of the cutting edge. The cutting edge itself is slightly curved, but not splayed. It is sharp and has clear re-sharpening marks.
- **British Museum Register:** "Copper alloy socketed celt, polygonal body with ribs, moulded mouth, L: 4,6", near Kew".
- **References:** Unpublished.
- **London:** British Museum (WG 1750)
- **Plate 32**

672. Sunbury, Middlesex (centred on parish: TQ105695)

- **Copper alloy socketed axe**
- **Type:** Transitional

- **LE:** 10,1cm
- **WI (cutting edge):** 5,7cm
- **WI (socket, inner-outer):** 2,5-3,4cm
- **LE (socket, back-front, inner-outer):** 2,5-3,4cm
- **WE:** 190,13g
- **Description:** Cast copper alloy socketed looped axe with smooth dark green/brownish patina. The axe is freckled with many light turquoise and light brown spots and the patina inside the socket it bright blue. The axe has a circular double mouth moulding and the casting seams at the sides have been hammered flat. The loop is somewhat small and has not been punched through, probably a casting flaw that was never rectified. The lower half of the blade displays signs of wear, especially re-sharpening marks which run parallel to the cutting edge. The axe has a much fainted decoration of ribs ending in small pellets. The ribs are unevenly spaced and of different lengths but mainly around 4,7cm. There are three ribs on each face and an additional two ribs aligned with the edges of the faces. All ten ribs terminate in a large flat pellet each.
- **British Museum Register:** "Sunbury, Middlesex, presented by Augustus W. Franks.
- **References:** Unpublished.
- **London:** British Museum (1865, 12-20, 4)
- **Plate 32 and 33**

673. Thames at Old England, Brentford, Middlesex (centred on River Thames at Brentford: TQ185775)

- **Copper alloy socketed axe**
- **Type:** Linear-decorated (?)
- **References:** O'Connor 1980, 584, List 227, no. 12.
- **Location:** Unknown.

674. Between Isleworth and Brentford, London (centred on River Thames at Brentford: TQ175763)

- **Iron socketed axe**
- **Type:** Iron socketed axe
- **Note:** Rainbow writes that he has found the axe himself, "in July 1921, on the low-tide beach of the Thames near "Old England", between Isleworth and Brentford, close to the spot where excavation has revealed remains of Hallstatt and later periods" (Rainbow 1928, 174).
- **References:**
  - Rainbow 1928, no. 6.
  - Manning and Saunders 1972, 285.
- **London:** Museum of London (33.153/1)

675. River Thames at Chelsea, London (centred on Rivers Thames at Chelsea: TQ275775)

- **Copper alloy socketed axe**

- **Type:** Sompting type, Kingston variant (?)
- **Description:** Heavy implement with circle-and-dot ornament connected by angular lines.
- **References:** Lawrence 1929, 92
- **London:** Museum of London (reg. no. unknown)

676. River Thames at Hammersmith, London (centred on River Thames at Hammersmith: TQ225783)

- **Copper alloy socketed axe**
- **Type:** Sompting type, Kingston variant
- **LE:** 12,7cm
- **WI (cutting edge):** 6cm
- **WI (socket, inner-outer):** 3,6-4,4cm
- **LE (socket, back-front, inner-outer):** 3,3-4,2cm
- **WE:** 496,46g
- **Description:** Decorated cast copper alloy socketed looped axe with dark brown/almost black patina on one side and yellowish-reddish patina speckled white flecks on the other. The loop is thick and has not punched through properly. Part of the bronze inside is also still in place. The axe has a square mouth with a thick upper mouth moulding and two thinner mouldings below. The sides of the axe are almost parallel; the cutting edge is somewhat splayed. The decoration is very faint: there are three small circlets just below the lowest mouth moulding on each side. They are 5-6mm in diameter and there is a small pellet inside each of them. 2-3 ribs expand from each circlet downwards (just over 5cm long). It seems that from the left circlet on both sides three ribs expand and only two ribs from the central and right circlet.
- **Note:** The label inside the axe reads: “River Thames, Hammersmith, Gr[eenwich?]”
- **References:** Unpublished.
- **London:** British Museum (P1964, 12-1, 6)
- **Plate 33**

677. River Thames at Syon Reach, Isleworth, London (centred on River Thames at Syon Park: TQ171762)

- **Copper alloy socketed axe**
- **Type:** Sompting type, Kingston variant
- **LE:** 11,8cm
- **WI (cutting edge):** 5,7cm
- **WI (socket, inner-outer):** 3,2-4,1cm
- **LE (socket, back-front, inner-outer):** 3,4-4,3cm
- **WE:** 348,4g
- **Description:** Cast copper alloy socketed looped axe with a dark brown/olive, patina speckled with a few white-beige flecks. The axe has a sub-rectangular mouth moulding with a thick upper and thinner lower mouth moulding. The sides of the axe are somewhat parallel and the cutting edge is splayed and of semicircular shape. The cutting edge shows signs of wear. The loop is circular and

broad, but not splayed. The decoration on both faces is weathered and faded. The pattern is much more worn further down while being clearer on the upper part of the axe. The upper half of both faces bears a rectangle constructed from thin ribs. The two vertical ribs (ca. 2cm long) of the rectangle are aligned with the edges of the face, while the upper horizontal rib (2,4cm) is part of the lower mouth moulding. There are two vertical, almost parallel ribs in the centre of the rectangle and they continue below it into two diverging ribs (3,8cm) terminating in very weathered circlets. There is another circlet between the diverging ribs, just below the rectangle, and from that another thin, extremely worn rib continues downwards to terminate in a small circlet which is also worn. While the other two circlets were plain, these two probably bore a thick pellet inside. The decoration was the same on both faces, except for the "central" rib that connects the two pellet-in-circlets between the diverging ribs ending in circlets only. On the other face there were clearly two parallel ribs instead of one central rib.

- **British Museum Register, Greenwell Collection:** "Thames, Syon Reach, London"
- **References:** Unpublished.
- **London:** British Museum (WG 1745)
- **Plate 33**

678. River Thames near Kew, London (estimate: TQ189780)

- **Iron socketed axe**
- **Type:** Iron socketed axe
- **Note:** Dredged from the River Thames.
- **References:**
  - Rainbow 1928, no. 5.
  - Manning and Saunders 1972, 285.
- **London:** Museum of London (A 13639)

679. River Thames at Mortlake, London (centred on River Thames at Mortlake: TQ207760)

- **Iron socketed axe**
- **Type:** Iron socketed axe
- **Note:** Dredged from the River Thames.
- **References:**
  - Rainbow 1928, no. 4.
  - Manning and Saunders 1972, 285.
- **London:** Museum of London (A13396)

680. River Thames at Mortlake, London (centred on River Thames at Mortlake: TQ207760)

- **Iron socketed axe**
- **Type:** Iron socketed axe
- **Note:** Dredged from the River Thames.
- **References:**
  - Rainbow 1928, no. 11.

        - Manning and Saunders 1972, 288.
    - **London:** Museum of London (A 8407)

681. River Thames at Putney, London (centred on River Thames at Putney: TQ239758)

- **Copper alloy socketed axe**
- **Type:** Sompting type, Cardiff II variant
- **LE:** 12.2cm
- **WI (blade):** 4.7cm
- **WI (socket, inner-outer):** 3.2-3.7cm
- **LE (socket, back-front, inner-outer):** 3.3-3.9cm
- **WE:** 282g
- **Description:** Long narrow cast copper alloy socketed looped axe with straight sides and only a single mouth moulding. The surface is much corroded but five (two of which coincide with the edges of the faces) long ribs terminating in small pellets.
- **References:** Unpublished
- **Oxford:** Ashmolean Museum (1955.157)
- **Plate 33**

682. River Thames at Millbank, Westminster, London (centred on Millbank Pier: TQ302784)

- **Copper alloy socketed axe**
- **Type:** Sompting type, Cardiff II variant
- **LE:** 13,5cm
- **WI (cutting edge):** 6cm
- **WI (socket, inner-outer):** 3,2-4,7cm
- **LE (socket, back-front, inner-outer):** 3,6-4,7cm
- **WE:** 513,8g
- **Description:** Cast copper socketed looped axe with dark red/orange surface colour with patches of bright green-turquoise patina and white flecks. The axe possesses a sub-rectangular double-mouth moulding with a large upper and very thin lower moulding. The loop at its side is very broad (1,5cm) and the axe show much post-casting work: the casting seams were smoothed down and the cutting edge was hammered into splayed shape. Also, there are defined re-sharpening marks and signs of wear. The axe itself is decorated with the standard rib-and-pellet ornament. The six ribs (three on each face) are thicker than usual and evenly spaced (6,4cm). All of them terminate in a very small pellet.
- **British Museum Register: Greenwell collection:** “Thames, Millbank, 1894”
- **References:** Unpublished.
- **London:** British Museum (WG 1743)
- **Plate 34**

683. Thames Street, London (centred on Thames St, Greenwich: TQ381778)

- **Iron socketed axe**
- **Type:** Iron socketed axe (unlooped)
- **Note:** Circumstances of discovery not known. This specimen has a rectangular socket which is split, and a triangular blade (similar to that of a leather-working knife), a form which is well known on the Continent (however, Manning and Saunder's comparison is from La Tène and might be slightly later).
- **References:** Manning and Saunders 1972, 288.
- **London:** Museum of London (A14410)

684. River Thames, London (centred on Thames at Westminster: TQ305790)

- **Copper alloy socketed axe**
- **Type:** Sompting type, Cardiff II variant
- **LE:** 13.4cm
- **WI (blade):** 5.6cm
- **WI (socket, inner-outer):** 3.5-4.7cm
- **LE (socket, back-front, inner-outer):** 3.5-4.7cm
- **WE:** 489g
- **Description:** Heavy cast copper alloy socketed looped axe with straight sides and slightly splayed cutting edge. The edge shows signs of wear and re-sharpening. The faces are decorated with three long ribs terminating in three very small pellets each which are set above enough other, on the rib, like pearls on a string.
- **References:** Unpublished.
- **Oxford:** Ashmolean Museum (1927.2641)
- **Plate 34**

685. River Thames, London (centred on Thames at Westminster: TQ305790)

- **Iron socketed axe**
- **Type:** Iron socketed axe
- **Note:** According to Manning and Saunders, the exact provenance unknown. However, if this really is Rainbow's axe no 3, then it was, quoting him, "… found in the Thames opposite the Tate Gallery on the Middlesex side." (Rainbow 1928, 174)
- **References:**
  - Rainbow 1928, no. 3.
  - Manning and Saunders 1972, 283.
- **London:** British Museum (WG 1785)

<u>Hampshire:</u>

Hoards:

686.-689. Danebury, Hampshire (SU324377)

- **Multi-period Hoard**
- **Type:** Sompting, Tower Hill/Kingston variants and Armorican
- **Description:** The main hoard contained twelve objects: one flanged axe, one small flat axe, part of a socketed spearhead, a

dirk, a sword hilt fragment (Ewart Park), two Hallstatt razors (see below), a Sompting type, Tower Hill variant axe, the top half of an Armorican type axe, the bottom part of a rib-and-pellet decorated axe (probably Sompting type, either Kingston or Tower Hill Variant), part of another socketed axe and a pin or pointed tool. There are some metal fragments and small tanged chisels which are associated with the hoard.

- **Copper alloy flat axe**
  - **LE:** 5,45cm
  - **WI (top):** 1,3cm
  - **WI (blade):** 2,4cm
  - **Thickness:** 6mm
  - **Weight:** 7,5g
  - **Description:** Small plain cast copper alloy flat axe with dark green patina and rough surface. Due to the roughness of the surface it is difficult to identify re-sharpening marks and other signs of wear, although the blade has certainly been expanded by re-sharpening. Its butt is thin and irregularly curved; the main body swells towards the centre of the axe and narrows down again towards the blade.
  - **Andover:** DA77 SF1181
- **Copper alloy flanged axe**
  - **LE:** 8,9cm
  - **WI (top):** 2cm
  - **WI (blade):** 4,5cm
  - **Height (flanges):** 1,4cm
  - **Weight:** 118g
  - **Description:** Cast copper alloy flanged axe with dark green patina and smooth surface. The flanges show recent damage from spade (?). There are no obvious signs of usage and re-sharpening marks, but the curved blade which was expanded by re-sharpening seems reasonably sharp still. The lower central part between the flanges is decorated with five grooves obscured by wear and five slightly curved and raised lines.
  - **Andover:** DA77 SF1167
- **Copper alloy dirk or short rapier**
  - **LE:** 24cm
  - **WI (top):** 2,4cm
  - **WI (blade, average):** 1,3cm
  - **Thickness (blade, centre):** 5mm
  - **WE:** 73,5g
  - **Description:** Cast copper alloy dirk or short rapier with dark green patina and smooth surface. The blade is slightly bent and the tip has been broken off in recent times. The butt end is trapezoidal shaped and has two notches on either side. The centre of the butt is thicker

than the sides and extends into a broad midrib down the blade.
        - **Andover:** DA77 SF1172
    - **Copper alloy spearhead**
        - **LE:** 8,3cm
        - **WI (blade, maximum):** 2,9cm
        - **Diameter, socket (inner-outer):** 0,9-1,35cm
        - **WE:** 49g
        - **Description:** Cast copper alloy leaf-shaped spearhead with dark green patina and smooth surface. The socket has been broken off and the remainder is slightly squashed. The bevelled edges of the blades are worn and there are also some recent scratches along the outermost part. The wings are solid and the blades, esp. the tip, are worn.
        - **Andover:** DA77 SF1179
    - **Copper alloy sword hilt fragment**
        - **Type:** Ewart Park
        - **LE (remaining):** 5,85cm
        - **WI (butt):** 4,15cm
        - **Thickness (hilt):** 0,45cm
        - **Diameter (rivet hole):** 0,5cm
        - **WE:** 38,5cm
        - **Description:** Upper part of a cast copper alloy sword hilt of a flange-hilted sword. There is one complete rivet hole and one half of another. The flanges are ca. 6mm high and straight. The top of the fin-shaped hilt still shows the thin casting seams on either side of the scar left by the casting jet. The top of the tang is straight; the scar of the casting-jet extends over the central 1,8cm with casting seams on either side.
        - **Andover:** DA77 SF1173
    - **Copper alloy razor**
        - **Type:** Feldkirch/Bernissart
        - **LE (cutting edge):** 8,8cm
        - **HE:** 5,5cm
        - **Thickness of loop:** 0,15cm
        - **Thickness of blade:** 0,01cm
        - **WE:** 25,5g
        - **Description:** Cast copper alloy single edged razor of Hallstatt type. The razor is very thin, even at the handle and the side loops, one of which sits in each of the upper two corners. Below, the razor displays an openwork ornament of one circular opening in the centre, and one almost rectangular opening one either side of the circle just underneath the upper end – the openwork casting has not been finished or trimmed. The blade of the razor is trapezoidal and very thin and shows clear signs of re-sharpening.

- **Note:** This razor is extremely similar to a razor from the Salisbury/ Netherhampton hoard – NB They have almost the same dimensions (compare Plate 35 with Plate 91, above)
- **Andover:** DA77 SF1170
- **References:**
  - Anon 1973-74, 18, Pl. II.
  - Jockenhövel 1980b, nos. 475 and 659.

○ **Copper alloy razor**

- **Type:** Havré/Gramat/circular-bladed
- **LE (cutting edge): /**
- **HE:** /
- **Thickness of loop: /**
- **Thickness of blade: /**
- **WE: /**
- **Description:** Found in 1974 in the same part of the hillfort as the other bronzes discussed here. This razor has an annular blade with trefoil openwork ornament; the handle consists of a shaft with a ring terminal, now broken. There are extensive marks of sharpening on the blade (O'Connor 1979, 238).
- **Note:** The form of this razor cannot be matched precisely, but the annular blade, openwork ornament and ring terminal can all be found on razors from a late Hallstatt C group in Burgundy.
- **Note:** Drawn while in South Wiltshire Museum, Salisbury, now in private collection.
- **References:**
  - Anon 1973-74, 18, Pl. II.
  - Jockenhövel 1980b, nos. 475 and 659.
- **Private Possession, Dr. N.B. Potter**

686. Copper alloy socketed axe

- **Type:** Sompting, Tower Hill variant
- **Andover:** DA77 SF1171
- **LE:** 13cm
- **WI (cutting edge):** 6,6cm
- **WI (socket, inner-outer):** 3,0-3,8cm
- **LE (socket, back-front, inner-outer):** 3,0-4,2cm
- **WE:** 485g
- **Description:** Cast copper alloy socketed looped axe with smooth surface and dark green patina. The axe has a double mouth moulding with a thicker upper and thinner lower mouth moulding of sub-rectangular shape. The casting seams along the sides have been smoothed down and the cutting edge has been expanded by re-sharpening. It is now fairly wide in contrast to the almost parallel sides and shows clear signs of usage and re-sharpening marks are running parallel to the curved blade.

However, the blade is not as splayed as the blades of axes predating the Early Iron Age – the corners of the cutting edge are curving downwards instead of upwards and they are less sharp than on earlier socketed axes. The axe is decorated with four long, evenly spaced ribs (ca. 6,8cm) ending in small pellets on either side.

- **Plate 34 and 36**

687. Copper alloy socketed axe fragment

- **Type:** Sompting, Tower Hill or Kingston variant
- **Andover:** DA77 SF1168
- **LE (remaining):** 9,4cm
- **WI (cutting edge, damaged):** ca. 5,6cm (original length)
- **WI (socket, inner-outer): /**
- **LE (socket, back-front, inner-outer): /**
- **WE:** 237g
- **Description:** Lower part of a cast copper alloy looped socketed axe. The faces of the axe are decorated with three evenly spaced ribs ending in circlets with smaller pellets in the centre of the circlets. The two outer ribs are on the edges of the axe, and the third is in the centre. There are marks of re-sharpening, but most of the cutting edge of the blade was broken off. One face was more thinly cast than the other.
- **Plate 34 and 36**

688. Copper alloy socketed axe fragment

- **Type:** Uncertain
- **Andover:** DA77 SF1175
- **LE (remaining):** 5,1cm
- **WI (cutting edge):** ca. 4cm
- **WI (socket, inner-outer): /**
- **LE (socket, back-front, inner-outer): /**
- **WE:** 100g
- **Description:** Lower part of a Cast copper alloy socketed looped axe. The cutting edge does not show any signs of use or re-sharpening and the remainder of the body of the axe have been distorted by hammering and tearing.
- **Plate 37**

689. Copper alloy socketed axe fragment

- **Type:** Armorican
- **Andover:** DA77 SF74
- **LE:** 8,5cm
- **WI (cutting edge):** /
- **WI (socket, inner-outer):** distorted
- **LE (socket, back-front, inner-outer):** distorted
- **WE:** 188,5g
- **Description:** Upper part of a cast copper alloy socketed looped axe, distorted, but with sharp angles. It displays a thicker upper mouth moulding with incomplete thinner lower mouth moulding underneath, both ill-defined. The

untrimmed moulding is only on its two faces, but missing from the sides of the axe. The mouth of the axe has been beaten and there are marks from severe impact on the main body as well. The blade has been torn off.
        - **Plate 37**
- **Copper alloy pin (?)**
    - **Andover:** DA77 SF1169
    - **LE:** 8,2cm
    - **Diameter (head):** ca. 1,4cm
    - **WE:** 15,5g
    - **Description:** Unique copper alloy pin (?) with hour-glass shaped head which displays an elongated concave centre and a trumpet shaped collar between its head and shaft. The shaft is now 4,7cm, but was originally ca. 5cm long – the tip is missing.
    - **Note:** Its sturdy 'head' and short pin suggest that this was not an ornamental pin but may have been used as a small, fine tool instead, using the 'head' as the handle, possibly for engraving or decorating pottery.
- **Copper alloy tanged chisel**
    - **Andover:** DA77 SF1182
    - **LE (remaining):** 5,4cm
    - **WI (blade):** 3,6cm
    - **WE:** 12,0g
    - **Description:** Cast copper alloy chisel with rough surface and very bright coppery golden patina. The stop-ridge is as flat as the tang and the blade and only the edge of the blade itself is much thinner than the rest of the chisel (naturally). The preservation is not very good and although the blade looks worn, no re-sharpening marks can be seen. The bright coppery golden colour singles this find out, as all the other objects of the hoard have almost the same dark green/olive patina.
- **Copper alloy axe fragment**
    - **Andover:** DA77 SF1191
    - **LE x WI:** 3,3 x 1,85cm
    - **WE:** 10g
    - **Description:** Corner of the blade of a copper alloy socketed axe, probably a small Late Bronze Age type.
- **Blade of copper alloy tanged chisel**
    - **Andover:** DA77 SF1189
    - **LE (remaining):** 3,85cm
    - **WI (blade):** 4,1cm
    - **WE:** 12,5g
    - **Description:** Lower part of a tanged cast copper alloy chisel. The blade and the stop-ridge are still intact; the tang is missing. The blade looks worn and sharpened.
- **Copper alloy arrow head**
    - **Museum Accession Number: DA77 SF1704**

        - **LE (remaining):** 3,45cm
        - **WI:** 1,3cm
        - **WE:** 7,5g
        - **Description:** Very corroded body fragment of a copper alloy leaf-shaped arrow head, tip and part of the socket missing.
    - **Copper alloy chisel fragment (?)**
        - **Andover:** DA77 SF1212
        - **LE:** 2,45cm
        - **WI:** 0,5-0,6cm
        - **WE:** 3g
        - **Description:** Probably tang of a cast copper alloy tanged chisel.
    - **Flat copper alloy chisel**
        - **Andover:** DA77 SF1245
        - **LE:** 5,8cm
        - **WI (blade):** ca. 1,5cm
        - **WE:** 6,55g
        - **Description:** Small flat cast copper alloy chisel, complete, with only a corner of the blade broken off. It has very low thick flanges on one side, but is completely flat on the other. The blade is much corroded.
    - **Copper alloy blade fragment (?)**
        - **Andover:** DA77 SF1206
        - **LE:** 3,9cm
        - **WI (max.):** ca. 2,3
        - **WE:** 9g
        - **Description:** Thin blade-like copper alloy sheet metal fragment. It has a very slight convex cross-section, but seems to thin altogether to be a fragment of a rapier or even sword blade. The fragment is much corroded.
    - **References:**
        - Cunliffe and O'Connor 1979, 235-7.
        - O'Connor 1980, 607, List 264, no. 2 and 609, List 268, no.1.
        - Britton, O'Connor and Cunliffe 1984, 335-7.
        - Thomas 1989, 281
        - Huth 1997, 274.
    - **Andover:** Hampshire County Museum (DA77 SF1167-75, 1179 and 1181)
    - **Plates 34-37**

690.-702. Nether Wallop, Hampshire (centred on road opposite Wallop School: SU30733760)

- **Axe Hoard**
- **Type:** Armorican
- **Description:** Hoard containing 13+ cast copper alloy socketed loop axes. Six of the axes are kept in the British Museum. One of the remaining axes is a rib-and-pellet decorated Armorican type

axe of the larger Brandivy variant; the other five axes in the British Museum are smaller variants of the Armorican type.
- **Note:** The four corners of the upper mouth mouldings of the five smaller axes appear worn and their patina appears shinier than the patina elsewhere on the axes, perhaps indicating that they were deposited or stored immediately side-by side.

690. Copper alloy socketed axe (1)
- **Type:** Armorican, Variant Brandivy
- **London:** British Museum (1922, 11-13, 1)
- **LE:** 14,5cm
- **WI (cutting edge):** 4,35cm
- **WI (socket, inner-outer):** 3,4-4,3cm
- **LE (socket, back-front, inner-outer):** 3,4-4,7cm
- **WE:** 366,6
- **Description:** Cast copper alloy socketed looped axe in as-cast condition. The axe is considerably bigger than the other five axes and was decorated with rib-and-pellet decoration on both faces. The five ribs are fairly short (4,2cm) making the rib length/axe length ratio of this axe similar to that of Late Bronze Age rib-and-pellet decorated South Eastern axes. There may be a further four ribs and pellets on this Armorican type axes – one on each of the two faces' edges, but they are very faint. The axe does not have a distinct back-to-front mouth moulding, but it has the thicker upper and two thinner, lower mouth mouldings. The surface is dark turquoise-green with patches if olive, white and beige and white and bright green flecks.

691. Copper alloy axe (2)
- **Type:** Armorican
- **London:** British Museum (1922, 11-13, 2)
- **LE:** 14cm
- **WI (cutting edge):** 3,5cm
- **WI (socket, inner-outer):** 2,7-3,4cm
- **LE (socket, back-front, inner-outer):** 2,9-3,8cm
- **WE:** 284,9g
- **Description:** Cast copper alloy socketed looped axe in as-cast condition. The axe has a double mouth moulding with a thick upper and small lower mouth moulding, back-to-front shaped. The axe has a light green-turquoise patina with white and dark reddish-brown patches and some bright white flecks.

692. Copper alloy axe (3)
- **Type:** Armorican
- **London:** British Museum (1922, 11-13, 3)
- **LE:** 13,8cm
- **WI (cutting edge):** 3,4cm
- **WI (socket, inner-outer):** 2,8-3,4cm
- **LE (socket, back-front, inner-outer): uncertain**
- **WE:** 305,3g
- **Description:** Cast copper alloy socketed looped axe in as-cast condition. The axe has a sub-rectangular double mouth moulding

with a thicker upper and thinner lower mouth moulding. It is of dark green-turquoise colour with beige and white flecks. A chunk has been snapped/broken off of the socket: the remaining metal of that face is still slight bent inwards – this is probably a mark for bending the metal outwards and inwards in order to weaken it, so that it would snap in the end.

693. Copper alloy axe (4)

- **Type:** Armorican
- **London:** British Museum (1922, 11-13, 4)
- **LE:** 12,8cm
- **WI (cutting edge):** 3,3cm
- **WI (socket, inner-outer):** 2,5-3,3cm
- **LE (socket, back-front, inner-outer):** 2,7-3,5cm
- **WE:** 263,2g
- **Description:** Cast copper alloy socketed looped axe in as-cast condition. The axe has a sub-rectangular double mouth moulding with a thicker upper and a thinner lower mouth moulding. The patina is dull light turquoise/brownish with white, beige and bright turquoise flecks. The inside of the axe's socket is floury-white in colour, just like the other ones. The upper mouth moulding is slightly damaged: it shows a small crack in the structure, which looks like it could have been a starting point for breaking up the axe, similar to the crack/ damage shown on axe no. 692.

694. Copper alloy axe (5)

- **Type:** Armorican
- **London:** British Museum (1922, 11-13, 5)
- **LE:** 12,2cm (13,2cm including casting flashes)
- **WI (cutting edge):** 3,3cm
- **WI (socket, inner-outer):** 2,3-3,15cm
- **LE (socket, back-front, inner-outer):** 3,0-3,7cm
- **WE:** 270,5g
- **Description:** Cast copper alloy socketed looped axe in as-cast condition. Some of the casting seams are still intact. It is very similar to axes nos. 692-693 with a sub-rectangular double mouth moulding and a thicker upper and thinner lower mouth moulding. One of the faces' edges is slightly damaged, but it is difficult to say whether it comes from the mould or happened after the casting process. The patina is dull turquoise green with white and bright red flecks and dull white patches.

695. Copper alloy axe (6)

- **Type:** Armorican
- **London:** British Museum (1922, 11-13, 6)
- **LE:** 12,7cm
- **WI (cutting edge):** 3,25cm
- **WI (socket, inner-outer):** 2,5-3,6cm
- **LE (socket, back-front, inner-outer):** 2,9-3,7cm
- **WE:** 505,6g
- **Description:** Cast copper alloy socketed looped axe in as-cast condition. The axe has a sub-rectangular double mouth moulding

with a thicker upper and thinner lower mouth moulding. Its patina is dark green with dull reddish green patches and white and turquoise flecks.

- **Note:** According to Huth, the axes were found as stray finds in a sandpit. There are at least 13, but probably more (Huth 1997, 274).
- **British Museum Register:** "Purchased from P.N. Douglas, British Bank of South America, 4 Moorgate Street, El. 4 (?). Part of founder's hoard found at Nether Wallop, Hants, near the road opposite Wallop School, in a pasture field."
- **References:**
  - Trustees of the British Museum 1953, 44-45.
  - Moore and Lewis 1969, 19-20.
  - Lewis 1969, 19-21.
  - Moore and Rowlands 1972, 57, no. 47.
  - Thomas 1989, 282
  - Huth 1997, 274.
- **London:** British Museum (6 axes: 1922, 11-13, 1-6); **Portsmouth:** Portsmouth Museum: 5 axes; **Salisbury:** Salisbury Museum: (1 axe: 46/1955), Private Possession: (1 axe).
- **Plates 38 and 39**

703.-704. New Forest, Hampshire (centred on Lyndhurst/New Forest: SU295085)

- **Axe Hoard**
- **Type:** Armorican (undecorated and decorated)
- **Note:** Lort offers two engravings of two Armorican axes which had been found "with a great many more in the New Forest" (Lort 1776, 114.). One of the axes is a small Armorican variant, while the other one is larger, decorated with one long rib that terminates in a small circle. It seems to have a casting flaw at the mouth moulding.
- **References:**
  - Lort 1776, 174, plate VIII, figs. 9 and 10.
  - Thomas 1989, 282
  - Huth 1997, 274.
- **Probably Lost.**

705.-772. near Southampton, Hampshire (SU4551803243; GPS from FLO)

- **Axe Hoard**
- **Type:** Armorican
- **Description:** Hoard of 68 cast copper alloy socketed looped axes in as-cast condition.
- **Note:** This is probably the hoard from Fawley, Hampshire, listed as HAMP1477 on the Portable Antiquities Scheme's Website www.finds.org.uk, recorded by S. Worrell.
- **References:** O'Connor *forthcoming*, no. 18.
- **Hampshire County Museums Service**

Single finds:

773. Froxfield, Hampshire (SU70842569)

- **Copper alloy socketed axe**
- **Type:** Transitional
- **Description:** “Cast bronze socketed axe; South Eastern type. Double mouth moulding. On one face there are three oblique ribs extending from the lower mouth moulding, but there is no trace of any on the other side which is badly affected by corrosion.” (S. Worrell, www.finds.org.uk)
- **Note:** Metal-detector find
- **References:** www.finds.org.uk HAMP3890
- **Returned to finder.**

774. a New Forest, Hampshire (centred on Lyndhurst/New Forest: SU295085)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **LE:** 13,3cm
- **WI (cutting edge):** 3,4cm
- **WI (socket, inner-outer):** 2,5-3,7cm
- **LE (socket, back-front, inner-outer):** 3,1-4,2cm
- **WE:** 250,8g
- **Description:** Cast copper alloy socketed looped axe in as-cast condition. The axe is undecorated and has a dark olive/blackish patina. The double mouth moulding is sub-rectangular and possesses very sharp angles. The sides of the axes are almost parallel making the cutting edge extremely narrow. The casting seams are intact and the cutting edge shows no signs of wear. There is small casting flaw between the two mouth mouldings: a small hole. Also, the ragged and misaligned casting seams suggest that the two halves of the mould were not fitted properly during the casting process.
- **Note:** The axe has a small label in its socket that reads: “Copper alloy socketed axe, imported to Britain from Brittany: Late Bronze Age. W.G. 1890. Greenwell Collection.”
- **Note:** This axe may be part of the above-mentioned hoard from the New Forest (nos. 703-704).
- **References:** Trustees of the British Museum 1953, 26, fig. 8.1.
- **British Museum Register, Greenwell Collection:** “New Forest, Arch. V, 114, pl. 8-10”
- **London:** British Museum (WG 1890)
- **Plate 40**

1394. Houghton Down Farm, Stockbridge, Hampshire (SU33153515)

- **Copper alloy socketed axe**
- **Type:** Sompting, Figheldean Down variant
- **LE:** 13,8cm
- **WI (cutting edge):** 5,6cm

- **WI (socket, inner-outer):** 3,2-4cm
- **LE (socket, back-front, inner-outer):** 3-3,9cm
- **WE:** 479.9g
- **Description:** Cast copper alloy socketed looped axe in as-cast condition. The cutting edge was neither used nor sharpened but the casting seams were smoothed down and the axe feels smooth to the touch. It has a square double-mouth moulding and a casting flaw on the reverse, just above the first rib, between the two mouth mouldings. The surface colour is dark olive green with patches of turquoise and flecks of white and orange. The axe is decorated with three plain ribs on each side, more or less evenly spaced. The sides of the axe are almost parallel making the cutting edge narrow.
- **Note:** This axe was made in the same mould or from the same template as seven of the axes from the Figheldean Down Hoard (Tilshead, Wiltshire, nos. 1033-1036, 1043, 1045 and 1048) and the large, heavy axe from the Salisbury Hoard (Netherhampton, Wiltshire, no. 1096). They all share an identical flaw on the reverse: a slightly misshapen mouth moulding, a flaw just above the first of the three ribs, between the two mouth mouldings. The mould may have been cracked or missing a small piece resulting in some superfluous metal being deposited between the two mouth mouldings.
- **References:** www.finds.org.uk/database: HAMP1871
- **Returned to finder/kept at farm where it was found.**
- **Plates 144 and 145**

Hertfordshire:

Hoards:

Single finds:

774. b Royston, Hertfordshire (centred on Royston: TL355415)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant (small)
- **LE:** 10.5cm
- **WI (blade):** 5.2cm
- **WI (socket, inner-outer):** 2.4-3.2cm
- **LE (socket, back-front, inner-outer):** 2.35-3.2cm
- **WE:** 186g
- **Description:** Small cast copper alloy socketed looped axe with rib-and-pellet decoration on both faces: The four 4.2cm long ribs terminate in small pellets. The axe has a double-mouth moulding and a slight collar between them. It has been used and re-sharpened.
- **References:** Unpublished.
- **Oxford:** Ashmolean Museum (1927.2635)

- **Plate 40**

Isle of White:

Hoards:

775. -805. Steephill, Ventnor, Isle of Wight (SZ553772)
- **Axe Hoard**
- **Type:** Armorican
- **Description:** Hoard of ca. 30 cast copper alloy socketed looped axes.
- **Note:** According to Thomas, “four axes survive out of a hoard of 30 Armorican axes found after a cliff fall” (Thomas 1989, 282).
- **References:**
  - Thomas 1989, 282.
  - Huth 1997, 274.
- **Newport:** Carisbrooke Castle Museum: 4 axes; the rest is probably lost.

Single Finds: none

Kent:

Hoards: none

Single finds:

806. River Thames near Erith, Kent (centred on Thames at Erith Pier: TQ514781)
- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 12.3cm
- **WI (blade):** 4.8cm
- **WI (socket, inner-outer):** 3.2-3.95cm
- **LE (socket, back-front, inner-outer):** 3.5-4.15cm
- **WE:** 412g
- **Description:** Cast copper alloy socketed looped axe with bright golden patina. It is decorated with five ribs (5.5cm in length) terminating in small pellets. The two outer ribs coincide with the edges of the faces. The axe has been used and re-sharpened, though some of the re-sharpening marks look recent.
- **References:** Evans 1881, 122.
- **Oxford:** Ashmolean Museum (1885.750)
- **Plate 40**

807. R. Medway, at Chatham, Kent (entered on Medway at Chatham: TQ754680)
- **Copper alloy socketed axe**
- **Type:** Transitional

- **LE (remaining):** 10,2cm
- **WI (cutting edge):** 4,8cm
- **WI (socket, inner-outer):** 3-3,6cm
- **LE (socket, back-front, inner-outer):** 3-3,95cm
- **WE:** 258,5g
- **Description:** Cast copper alloy socketed looped axe with thick yellow patina with rusty and green flecks. This patina and the water-logged piece of wood inside the socket strongly suggest that this axe was found in a watery context. The decoration is weathered, but still visible: There are three evenly spaced ribs on each face, one being in the exact centre of the face and the outer two aligned with the edges of the faces of the axe. Each rib terminates in a very weathered pellet. The cutting edge is curved and as some of the patina has been scratched away, re-sharpening marks are clearly visible.
- **References:** Unpublished.
- **London:** British Museum (1964, 12-6, 14)
- **Plate 40**

Lancashire

Hoards:

808.+809. River Ribble, Clitheroe, Lancashire (SD7342)

- **Axe hoard**
- **Type:** Sompting type, Tower Hill variant/Kingston (?)
- **Description:** A very small hoard of two cast copper-alloy socketed looped axes.
- **Note:** Foster and Davey only publish a drawing of one of the axes, and it appears to be the reproduction of an engraving from a mid-19th-century publication.
- **References:** Davey and Foster 1975, no. 120.
- **Private Possession**

Single finds:

810. Winwick, near Warrington, Lancashire (centred on Winwick: SJ606928)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 11,2cm
- **WI (blade):** 5,6cm
- **WI (socket, inner):** 3cm
- **LE (socket, back-front, inner):** 3cm
- **Description:** Cast copper alloy socketed looped axe with elaborate decoration. There are three ribs terminating in pellets on each face. A herring-bone pattern connects the ribs to each other and also to the edges of the faces.

- **References:**
  - Evans 1881, 123-124, fig. 136.
  - Schmidt and Burgess 1981, no. 1631.
  - Conwell 1986-87, fig. 9, 6.
- **Warrington:** Warrington Museum (RM 23)

Leicestershire:

Hoards:

811. -826. Ketton, Rutland, Leicestershire (SK98450550 (probably found in the quarry nearby))

- **Axe Dominated Hoard**
- **Type:** Transitional
- **Description:** Hoard consisting of one socketed knife, sixteen socketed axes and one ingot.
- **Note:** The axes in this hoard show Late Bronze Age and Early Iron Age features: most have a double back-to-front mouth moulding and the upper mouth moulding is usually more pronounced than the lower moulding. Their faces' decoration consists of different arrangements of ribs.
- **References:** Vine 1982, 192-3.
- **Oakham:** Rutland County Museum (1972.31), except one axe which is with Ketton Portland Cement Co. Ltd. (1972.31(3)).

Single finds:

827. Jericho Lodge, Thrussington, Leicestershire (centred on point between Jericho Fm and Lodge Fm: SK641193)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:**
  - Vine 1982, 195.
  - www.le.ac.uk/lahs/downloads/PowellPagesfromsmvolumeXXV-4.pdf (Powell, T.G.E. 1939; Transaction of the Leicestershire Archaeological Society XXV, 4, 51-55.
- **Leicester:** Leicester Museum (26.1948)

Lincolnshire:

Hoards:

828. -837. Branston, Lincolnshire (centred on Branston: TF025675)

- **Axe Hoard**
- **Type:** Transitional
- **Description:** Hoard of ten cast copper alloy socketed looped axes: one facetted axe, one plain axe, possibly of Everthorpe type and eight ribbed axes, possibly of Yorkshire type.
- **Notes:**

  - One of the ribbed axes and one of the plain axes have a very distinct sub-rectangular mouth moulding.
  - All ten axes remain untrimmed and Davey argues that 8 of them come from 4 different moulds, however, his separation cannot be correct, e.g. he claims that his nos. 303 and 304 are from the same mould, but Davey's no. 303 is a plain Everthorpe type axe while Davey's no. 304 is a facetted axe, both with different bodies and different mouth mouldings. In order to determine whether or not any of the axes come from the same moulds, a more detailed analysis is needed.
- **References:** Davey 1973, 93, fig. 32.
- **Lincoln:** Lincoln Museum (129/132-08, 45/50-19)

Single finds:

838. Boston, Lincolnshire (centred on Boston: TF3343)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE (remaining):** 13,2cm
- **WI (cutting edge):** 5,3cm
- **WI (socket, inner-outer):** 3,3-4,4cm
- **LE (socket, back-front, inner-outer):** 3,3-4,5cm
- **WE:** 467,5g
- **Description:** Cast copper alloy socketed looped axe with dull olive-green patina that is freckled with white, dull green and beige flecks. The axe possesses a clear double mouth moulding with a thicker upper and thinner lower mouth moulding. It is slightly sub-rectangular. The overall shape appears rectangular with straight sides and fairly flat faces. There is weathered decoration on both faces: three long ribs (6,75cm in length) terminating in a "double-pellet", that is two small pellets set above each other. The edges of the faces are slightly raised so as to make another "rib" that is also ending in a double-pellet. There are no clear signs of re-sharpening or wear, but the axe seems to have been sharp and it certainly has not come straight from the mould. The casting seams are not very pronounced, but they have also been smoothed down in some places to make them more even. The loop is not splayed but fairly thick and sturdy.
- **References:** Davey 1973, 68, fig. 13.
- **London:** British Museum (WG 1993)
- **British Museum Register, Greenwell Collection:** "Boston, Lincolnshire"
- **Plate 41**

839. Redbourne, Lincolnshire (centred on parish: SK978984)

- **Copper alloy socketed axe**
- **Type:** Transitional

- **Description:** Cast copper alloy socketed looped axe with round single mouth moulding, slightly diverging sides and a wide and straight cutting edge. Both faces are decorated with three long ribs terminating in a small pellet each.
- **References:** Davey 1973, 74, fig. 13.
- **Scunthorpe:** Scunthorpe Museum (RD AD)

840. Scunthorpe, Lincolnshire (centred on parish: SE903085)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 12,7cm
- **WI (cutting edge):** 5,4cm
- **WI (socket, inner-outer):** 3,5-4,3cm
- **LE (socket, back-front, inner-outer):** 3,5-4,55cm
- **WE:** 389,6g
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration. The surface of the axe is rough, of black-dark olive colour and is slightly affected by bronze disease. The sides of the axe are almost parallel resulting in a straight cutting edge. The axe is still somewhat sharp, but it is unclear whether it has been used or re-sharpened. The two faces are decorated with five ribs each (ca. 5,2cm in length) terminating in small pellets. The two outer ribs on each individual face are aligned with the edges of the face. The axe possesses an almost square double mouth moulding with a thick upper and very shallow lower mouth moulding. The loop at its side is very broad, but not splayed. Also, it is slightly damaged: there is a horizontal tear across it the middle of the loop. The casting seams are not very prominent apart from between the loop and the mouth moulding and just below loop.
- **References:** Davey 1973, 68, fig. 13.
- **London:** British Museum (WG 1991)
- **British Museum Register, Greenwell Collection:** “Scunthorpe, Lincs, 1904”
- **Plate 41**

841. ‘Trent’, Lincolnshire (centred on river: SE833055)

- **Copper alloy socketed axe**
- **Type:** possibly Sompting, Cardiff II variant
- **Description:** Cast copper alloy looped socketed axe with round double mouth moulding that looks unfinished in Davey’s drawing. The sides are almost parallel and the blade is only somewhat splayed. The faces are decorated with four ribs terminating in pellets each and there is one row of three small crosses between the lower parts of the ribs.
- **Note:** “Dredged from the River Trent; for several years in the collection of the Repose Inn near Lincoln. Acquired at a sale, March 1927 by Mr R.D. Stokes, and presented to the Museum 3rd August 1927.” (Davey 1973, 77).

- **References:** Davey 1973, 77, fig. 13.
- **Lincoln:** Lincoln Museum (301-1927)

Norfolk:

Hoards:

842.-844. Cringleford, Norfolk (centred on parish: TG195055)

- **Axe Hoard**
- **Type:** East Rudham
- **Description:** Two, or possibly three, Cast copper alloy socketed looped axes
  - Two East Rudham type axes with sub-rectangular double mouth moulding and almost completely intact casting seams (along the sides and inside the loops). The decoration is the typical one for East Rudham axes: decorated grooves run along the edges of the faces; on one axe the grooves terminate in a pellet.
  - In the SMR a third axe has been recorded to having come from Cringleford. It shares the same SMR number as the other two and probably belongs to the hoard. It is also an East Rudham axe; it has, however, a rectangular mouth moulding and the decorative grooves have been applied much more carelessly. The casting seems are still intact and there is a casting flaw on one of the faces. It is not in the Castle Museum and may still be with the finder.
- **842. Copper alloy axe (1)**
  - **Type:** East Rudham
  - **Norwich:** Norwich Castle Museum (1997-708.2)
  - **LE:** 10,3cm
  - **WI (blade):** 4,8cm
  - **WI (socket, inner-outer):** 2,5-3,0cm
  - **LE (socket, back-front, inner-outer):** 2,8-3,4cm
  - **WE:** 212,80
  - **Description:** Cast copper alloy socketed looped axe, linear-decorated. This axe is in as-cast condition. The loop has not been punched through and the blade and sides still show their casting flashes. The surface is rough and damaged on both faces. The patina is dark grey with a slight dark green and red shimmer to it. Both faces are decorated with three slightly raised lines near the edges – and three grooves between them. They run parallel to the edges and narrow to meet just over half-way down.
- **843. Copper alloy axe (2)**
  - **Type:** East Rudham
  - **Norwich:** Norwich Castle Museum (1997-708.1)
  - **LE:** 10,2cm
  - **WI (blade):** 4,5cm
  - **WI (socket, inner-outer):** 2,3-3,1cm

        - **LE (socket, back-front, inner-outer),** 2,8-3,4cm
        - **WE:** 177,41g
        - **Description:** Cast copper alloy socketed looped axe, possibly part of a small hoard, together with the above. The patina is the same as above, but the surface is not as rough. The casting flashes have been smoothed down and the loop hole punched, but there is a small hole just next and beneath the loop – a casting flaw. The decoration of this axe is finer and the grooves are much more distinct and meet in a pellet on both faces. This axe, like the other one and though it is not in as-cast condition, shows no other signs of wear. It has not been sharpened or re-sharpened and although there are clearly dents and notches in the cutting edge, they do not come from chopping wood or similar woodwork or impacts (compare with no. 887)
    - **Note:** These two axes are very similar to the two specimens from Syderstone (nos. 887+888)
    - **References:** Unpublished.
    - **Norwich:** Norwich Castle Museum (1997.708.1+2); **Sites and Monuments Record (SMR) No. 16229**
    - **Plate 41 and 42**

845.-886. East Rudham, Norfolk (TF83632908)

- **Axe Hoard**
- **Type:** East Rudham
- **Description:** Very thinly cast copper alloy socketed looped axes, individually numbered 1-77. Nos. 1-42 are complete (see individual catalogue numbers) and nos. 43-77 are fragments (no individual catalogue numbers)). Twenty-three of the forty-two complete axes were measured, weighed and described by the then Finds Liaison Officer for Norfolk, Katie Hinds, for the Portable Antiquities Scheme database (see below).
- **Note:** The hoard was found whilst out metal detecting and reported to the local Finds Liaison Officer before the Amendment to the Treasure Act of 1996 came into effect in 2002. The Amendment states that prehistoric assemblages of 2+ metallic artefacts need to be reported as potential Treasure under the Act of 1996. However, assemblages found before 1st of January 2003 are exempt. The hoard was found pre-2003 and was returned into private possession after partial recording by the Finds Liaison Officer. The finder kindly took it back into the museum and left with me for a few hours at the time of my visit to Norfolk Archaeology Unit in Gressenhall, but the descriptions below are essentially Katie Hinds', taken from the Portable Antiquities Scheme database. There are no measurements or descriptions for socketed axes nos. 868-886.
- **845. Copper alloy socketed axe (1)**
    - **Type:** East Rudham

- www.finds.org.uk NMS181
- **LE:** 9.9cm
- **WI:** 4.6cm
- **WE:** 193g
- **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower gives rise to a loop at the side of the body. Descending from the lower moulding are four raised ribs in two groups of two separated by an 8mm gap in the centre. The two outermost ribs on either face emphasise the angles of a rectangular-sectioned body. The two inner ribs curve gently and then more steeply to join the outer ribs at a point ¾ of the way down the body. With the loop to the left, these inner ribs run virtually parallel for about 2/3 of the way. With the loop to the right, the lines can only be said to be parallel where they begin. The sides of the body are concave and flare gently to the axe's widest point at the blade edge. The socket tapers in profile to a narrow but blunt end. The loop is small and round and thin (inside hole c.6mm long, width c.5mm) with an asymmetrical oval section. Unfinished rim (incomplete loop-side and opposite loop-side) with two projections (one larger) opposite each other on the inside of the rim above each face and lumps of casting debris in between the upper and lower mouth mouldings. Casting flashes along both sides. With the loop to the right, the flash is especially prominent as it approaches the blade. The cutting edge is blunt (unfinished?) with small fairly recent break at one corner. Three circular impressions c. 3mm diam. appear on the body (loop right).

- **846. Copper alloy socketed axe (2)**
  - **Type:** East Rudham
  - www.finds.org.uk NMS182
  - **LE:** 10cm
  - **WI:** 4,4cm
  - **WE:** 203g
  - **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower gives rise to a loop at the side of the body. Descending from the lower moulding are four raised ribs in two groups of two separated by an 8mm gap in the centre. The two outermost ribs on either face emphasise the angles of a rectangular-sectioned body. The two inner ribs curve gently and then more steeply to join the outer ribs at a point ¾ of the way down the body. With the loop to the left, these inner ribs run virtually parallel for about 2/3 of the way. With the loop to the right, the lines can only be said to be parallel where

they begin. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loop is small and round and thin (inside hole c.6mm long, width c.5mm) with an asymmetrical oval section. Rim unfinished with two semi-circular projections (more prominent than in 1- better casting?) opposite each other on the inside of the rim above each face. There also seem to be two triangular nicks at each join on the rim. Casting flashes along both sides and more obvious than 1, especially prominent on the rim- and loop-joins. Patina silvery/ copper coloured, though mostly covered in bronze disease.

- **847. Copper alloy socketed axe (3)**
  - **Type:** East Rudham
  - www.finds.org.uk NMS183
  - **LE:** 10,4cm
  - **WI:** 4,5cm
  - **WE:** 210g
  - **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower gives rise to a loop at the side of the body. Descending from the lower moulding are (probably) four raised ribs in two groups of two separated by a 5mm gap in the centre. The two outermost ribs on either face seem to emphasise the angles of a rectangular-sectioned body but are not obviously there as 1 & 2 are (possibly as they are obscured by corrosion, or because the metal itself seems to have expanded and obscured the ribs). With the loop to the left, the two inner ribs fall steeply and close together suddenly curving to join the outer ribs at a point ¾ of the way down the body. With the loop to the right, the inner ribs are further apart and curve more gently towards the point. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loop itself is larger and more semi-circular than 1 & 2 (inner hole c.10mm long, width 8mm) with an asymmetrical oval section. Unfinished rim with two projections (one broken). Casting flashes prominent along both sides. With the loop to the right, there is a small dent just below the lower mouth moulding between the two innermost ribs. A bump on the inside of the axe suggests this isn't a casting error. Cutting edge is blunt and unfinished with casting flash clearly visible. There are several lumps and bumps of bronze on the surface and the metal seems almost distorted in places.
- **848. Copper alloy socketed axe (4)**
  - **Type:** East Rudham

- www.finds.org.uk NMS184
- **LE:** 10,2cm
- **WI:** 4,2cm
- **WE:** 203g
- **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low ridge (with loop right, it is almost imperceptible). The loop projects from the groove between the mouldings. Descending from the lower moulding are four raised ribs in two groups of two separated by a 10mm gap in the centre. The two outermost ribs follow a furrow which emphasises the edge of the rectangular-sectioned body, but which slightly curves. The two inner ribs follow the outer, curving behind it and then round it to join it at a point ¾ of the way down the body. These also follow the line of a furrow which precedes them from the centre. The sides of the body are more-or-less straight but flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loop is small and thin (inside hole c.8mm long, width c.4mm) with an asymmetrical oval section. Rim unfinished, jagged edges with two semi-circular projections opposite each other on the inside of the rim above each face. Casting flashes along both sides, though quite worn. Especially prominent around loop. Loop itself is broken and most of it is missing. Cutting edge is blunt with casting flash visible. Patina dark green and flaky with what looks like iron staining around upper mouth moulding (loop left).

- **849. Copper alloy socketed axe (5)**
  - **Type:** East Rudham
  - www.finds.org.uk NMS185
  - **LE:** 10,4cm
  - **WI:** 4,7cm
  - **WE:** 201g
  - **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low ridge which gives rise to a loop at the side of the body. Descending from the lower moulding are six raised ribs (1-6 respectively) in two groups of three separated by a 2-4mm gap in the centre. The two outermost ribs follow a furrow which emphasises the prominent edge of the rectangular-sectioned body. The two innermost ribs (3&4) fall steeply and then gently curve around the outer ribs (1&2 & 5&6) to join this prominent edge at a point ¾ of the way down the body. Thus the two pairs of outer ribs are enclosed within this pattern and copy it. The two innermost ribs meet the two outermost ribs before it joins

the prominent edge, and creates a point slightly higher up than this. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loops have an asymmetrical oval section varying in thickness and width, but all have an inner hole size of c.7mm.5 Unfinished rim with jagged upward projection. Casting flashes prominent along both sides. With the loop to the right, there is a small dent along the line between the mouth mouldings, accentuated by a raised bump directly to its left. There is a small deposit/ scrap of bronze clinging to the inside of the axe. Cutting edge is sharp though unfinished with casting flash visible. There are several lumps and bumps of bronze on the surface of the metal and a possible dent 20mm from the cutting edge (loop left). The metal seems almost distorted in places. Original surface can be seen though is badly disguised by bronze disease (my diagnosis, not conservator!). Loop width 6mm, 3mm gap between innermost ribs.

        - **Plate 42**
- **850. Copper alloy socketed axe (6)**
    - **Type:** East Rudham
    - www.finds.org.uk NMS186
    - **LE:** 10,4cm
    - **WI:** 4,6cm
    - **WE:** 190g
    - **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low ridge which gives rise to a loop at the side of the body. Descending from the lower moulding are six raised ribs (1-6 respectively) in two groups of three separated by a 2-4mm gap in the centre. The two outermost ribs follow a furrow which emphasises the prominent edge of the rectangular-sectioned body. The two innermost ribs (3&4) fall steeply and then gently curve around the outer ribs (1&2 & 5&6) to join this prominent edge at a point ¾ of the way down the body. Thus the two pairs of outer ribs are enclosed within this pattern and copy it. The two innermost ribs meet the two outermost ribs before it joins the prominent edge, and creates a point slightly higher up than this. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loops have an asymmetrical oval section varying in thickness and width, but all have an inner hole size of c.7mm. Unfinished or worn rim with small semi-circular projections visible opposite each other at the top of the

rim above each face. A triangular nick appears at the top of the rim on the two joins. Casting flashes are visible along both sides and both corners of the cutting edge are broken and missing, one break more recent than the other. Cutting edge is sharp though worn and breaking (probably not through use but corrosion). With loop to the right, the metal is distorted and the surface bumpy with a few small holes visible (corrosive, recent). Original surface can be seen in places, though patina is dark brown with bronze disease especially around the blade area (my diagnosis, not conservator!). (loop width 6mm bottom, 4mm top; 4mm gap between innermost ribs)

- **Plate 42**

- **851. Copper alloy socketed axe (7)**
  - **Type:** East Rudham
  - www.finds.org.uk NMS187
  - **LE:** 10,3cm
  - **WI:** 4,5cm
  - **WE:** 184g
  - **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low ridge which gives rise to a loop at the side of the body. Descending from the lower moulding are six raised ribs (1-6 respectively) in two groups of three separated by a 2-4mm gap in the centre. The two outermost ribs follow a furrow which emphasises the prominent edge of the rectangular-sectioned body. The two innermost ribs (3&4) fall steeply and then gently curve around the outer ribs (1&2 & 5&6) to join this prominent edge at a point ¾ of the way down the body. Thus the two pairs of outer ribs are enclosed within this pattern and copy it. The two innermost ribs meet the two outermost ribs before it joins the prominent edge, and creates a point slightly higher up than this. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loops have an asymmetrical oval section varying in thickness and width, but all have an inner hole size of c.7mm.7 Unfinished rim with upward projection, and semi-circular inward projections opposite each other at the top of the rim above each face. A triangular nick appears at the top of the rim on the two joins. Casting flashes are prominent along both sides (especially above the loop where the flash makes a continuous line between loop-edge and rim-top) creating a rough edge. One corner of the cutting edge has been recently broken, exposing the metal beneath (reddish-brown). Cutting edge is worn and mangled (probably unfinished then). With loop to the right,

there is a large hole c.7mm long. Patina is coppery-coloured and the surface pitted, with bronze disease towards the cutting edge (my diagnosis, not conservator!). (loop width 6mm, 2-4mm gap between innermost ribs)

- **852. Copper alloy socketed axe (8)**
  - **Type:** East Rudham
  - www.finds.org.uk NMS188
  - **LE:** 10,4cm
  - **WI:** 4,7cm
  - **WE:** 183g
  - **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low ridge which gives rise to a loop at the side of the body. Descending from the lower moulding are six raised ribs (1-6 respectively) in two groups of three separated by a 2-4mm gap in the centre. The two outermost ribs follow a furrow which emphasises the prominent edge of the rectangular-sectioned body. The two innermost ribs (3&4) fall steeply and then gently curve around the outer ribs (1&2 & 5&6) to join this prominent edge at a point ¾ of the way down the body. Thus the two pairs of outer ribs are enclosed within this pattern and copy it. The two innermost ribs meet the two outermost ribs before it joins the prominent edge, and creates a point slightly higher up than this. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loops have an asymmetrical oval section varying in thickness and width, but all have an inner hole size of c.7mm.8 Unfinished rim with jagged edge and projections (1 broken) opposite each other at the top of the rim above each face, and dent/ longitudinal break (loop right). A triangular nick appears at the top of the rim on the two joins. Casting flashes are visible along both joins and cutting edge, which is blunt and unfinished. The surface is mostly smooth, with a slight dip-and-bulge running down the middle (loop left). Dark green, bronze-diseased patina (my diagnosis, not conservator!) with original metal showing on some of the ribs and on the bulge. (loop width 7mm, 4mm gap between innermost ribs)
  - **Plate 42**
- **853. Copper alloy socketed axe (9)**
  - **Type:** East Rudham
  - www.finds.org.uk NMS189
  - **LE:** 10,2cm
  - **WI:** 4,7cm
  - **WE:** 197g

- **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low ridge which gives rise to a loop at the side of the body. Descending from the lower moulding are six raised ribs (1-6 respectively) in two groups of three separated by a 2-4mm gap in the centre. The two outermost ribs follow a furrow which emphasises the prominent edge of the rectangular-sectioned body. The two innermost ribs (3&4) fall steeply and then gently curve around the outer ribs (1&2 & 5&6) to join this prominent edge at a point ¾ of the way down the body. Thus the two pairs of outer ribs are enclosed within this pattern and copy it. The two innermost ribs meet the two outermost ribs before it joins the prominent edge, and creates a point slightly higher up than this. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loops have an asymmetrical oval section varying in thickness and width, but all have an inner hole size of c.7mm.9 Unfinished rim with good profile and semi-circular projections opposite each other at the top of the rim above each face. A triangular nick appears at the top of the rim on the two joins. The rim is rather heavily cast, (loop right) there is a large bulge and evidence of a surface break. There is also a large hole in the upper mouth moulding beside the non-loop side join, with only a small bulge on the interior (casting error therefore). Casting flashes are visible along both sides (especially jagged above the loop) and across the blunt cutting edge. With loop right, the left-side ribs have been mis-cast and part of the outmost rib appears as a line of three dots. The next rib has sections missing. The innermost rib has distorted and flattened to become almost indistinguishable with the body. The surface is scratched and chipped. With loop left, there is a dent/ distortion in the middle and similar rib mis-castings. Dark green/ brown patina, pitted surface. Bronze disease covers majority (my diagnosis, not conservator!). (loop width 4mm, 3mm gap between innermost ribs)

- **854. Copper alloy socketed axe (10)**
  - **Type:** East Rudham
  - www.finds.org.uk NMS190
  - **LE:** 10,1cm
  - **WI:** 4,5cm
  - **WE:** 210g
  - **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low

ridge which gives rise to a loop at the side of the body. Descending from the lower moulding are six raised ribs (1-6 respectively) in two groups of three separated by a 2-4mm gap in the centre. The two outermost ribs follow a furrow which emphasises the prominent edge of the rectangular-sectioned body. The two innermost ribs (3&4) fall steeply and then gently curve around the outer ribs (1&2 & 5&6) to join this prominent edge at a point ¾ of the way down the body. Thus the two pairs of outer ribs are enclosed within this pattern and copy it. The two innermost ribs meet the two outermost ribs before it joins the prominent edge, and creates a point slightly higher up than this. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loops have an asymmetrical oval section varying in thickness and width, but all have an inner hole size of c.7mm.10 Unfinished rim with jagged edge and semi-circular projections opposite each other at the top of the rim above each face. A triangular 'flat' appears at the top of the rim on the two joins. The top seems to have been flattened. Casting flashes are prominent and jagged (possibly merged slightly off-centre) along both sides and across the blunt cutting edge. The loop is rather thick and wide (W.9mm bottom) with mis-cast bulge. With loop right, the surface is distorted and bulges with small bumps towards the cutting edge. The patina is silvery/ copper with patches of bronze disease (my diagnosis, not conservator!). With loop left, bronze disease covers most of the axe. Silvery, bumpy surface visible at sides. Small bronze deposit on non-loop side. (4mm gap between innermost ribs)

        - **Plate 43**
- **855. Copper alloy socketed axe (11)**
    - **Type:** East Rudham
    - www.finds.org.uk NMS191
    - **LE:** 10,1cm
    - **WI:** 4,3cm
    - **WE:** 221g
    - **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower gives rise to a tiny loop at the side of the body. Descending from the lower moulding are two 4mm wide max furrows separated by a 10mm gap in the centre. This emphasises the edge of the rectangular-sectioned body and creates a central ridge which falls steeply then curves round to join the external edge at a point ¾ of the way down the body. The sides of the body are concave and flare gently to the axe's widest

point at the cutting edge. The loop is tiny and round and has an asymmetrical oval section (inside hole c.5mm long, width c.5mm). Unfinished rim, heavily cast with semi-circular projections opposite each other at the top of the rim above each face (1 broken off). Top appears flattened. Casting flashes are (just, through corrosion) visible along both sides but smoothed through wear/ corrosion. With loop right, there is a 6x2mm hole (mis-casting) in the left-hand furrow and a spot of iron corrosion on the cutting edge. With loop left, there is a tiny hole (through corrosion?) between the mouldings on the rim. Dark green patina, bronze disease (my diagnosis, not conservator!). Tiny area of original surface can be seen on rim, loop right. Peculiar bronze deposit inside socket, core? The soil inside the axe is fine and sandy with traces of green (bronze deposits?).

        - **Plate 43**

- **856. Copper alloy socketed axe (12)**
    - **Type:** East Rudham
    - www.finds.org.uk NMS192
    - **LE:** 10,3cm
    - **WI:** 4,4cm.
    - **WE:** 196g
    - **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low ridge which gives rise to a loop at the side of the body. Descending from the lower moulding are six raised ribs (1-6 respectively) in two groups of three separated by a 2-4mm gap in the centre. The two outermost ribs follow a furrow which emphasises the prominent edge of the rectangular-sectioned body. The two innermost ribs (3&4) fall steeply and then gently curve around the outer ribs (1&2 & 5&6) to join this prominent edge at a point ¾ of the way down the body. Thus the two pairs of outer ribs are enclosed within this pattern and copy it. The two innermost ribs meet the two outermost ribs before it joins the prominent edge, and creates a point slightly higher up than this. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loops have an asymmetrical oval section varying in thickness and width, but all have an inner hole size of c.7mm.Unfinished heavily cast rim with semi-circular projections opposite each other at the top of the rim above each face. A triangular nick appears at the top of the rim on the two joins. Casting flashes are prominent along both sides, especially so on the loop-side join where there is a 1-2mm default of casting. The cutting

edge is pointed and smooth and a little broken. The patina is silvery/ copper (with patches of bronze disease and a blue deposit on the body (loop right) -my diagnosis, not conservator!), becoming dark green around the rim. The metal is distorted, lumpy and pitted where it can be seen. (loop width 5mm, 3mm gap between innermost ribs) The soil inside the axe is sandy and fine with tiny curls of a green material. Bronze loops or something more organic?

- **Plate 42**

- **857. Copper alloy socketed axe (13)**
  - **Type:** East Rudham
  - www.finds.org.uk NMS193
  - **LE:** 10,2cm
  - **WI:** 4,6cm
  - **WE:** 200g
  - **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low ridge which gives rise to a loop at the side of the body. Descending from the lower moulding are six raised ribs (1-6 respectively) in two groups of three separated by a 2-4mm gap in the centre. The two outermost ribs follow a furrow which emphasises the prominent edge of the rectangular-sectioned body. The two innermost ribs (3&4) fall steeply and then gently curve around the outer ribs (1&2 & 5&6) to join this prominent edge at a point ¾ of the way down the body. Thus the two pairs of outer ribs are enclosed within this pattern and copy it. The two innermost ribs meet the two outermost ribs before it joins the prominent edge, and creates a point slightly higher up than this. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loops have an asymmetrical oval section varying in thickness and width, but all have an inner hole size of c.7mm. Unfinished rim, flattened on top with semi-circular projections opposite each other at the top of the rim above each face (1 broken). A triangular nick, now squashed, appears at the top of the rim on the two joins. Casting flashes are prominent but smooth along both sides and across the blunt cutting edge but rather jagged on the loop. With loop right, the body is bulged and distorted between the inner ribs. The surface is bumpy on both sides with evidence of bronze disease (my diagnosis, not conservator!). Dark green patina with evidence of iron staining and original surface coming through on the ribs. White/ chalky deposit inside socket. (loop width 8mm,

3mm gap between innermost ribs) Soil fine (though not as fine as11 & 12) with chalky and other inclusions. Retained.
    - **Plate 42.**
- **858. Copper alloy socketed axe (14)**
    - **Type:** East Rudham
    - www.finds.org.uk NMS194
    - **LE:** 10,2cm
    - **WI:** 4,7cm
    - **WE:** 192g
    - **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low ridge which gives rise to a loop at the side of the body. Descending from the lower moulding are six raised ribs (1-6 respectively) in two groups of three separated by a 2-4mm gap in the centre. The two outermost ribs follow a furrow which emphasises the prominent edge of the rectangular-sectioned body. The two innermost ribs (3&4) fall steeply and then gently curve around the outer ribs (1&2 & 5&6) to join this prominent edge at a point ¾ of the way down the body. Thus the two pairs of outer ribs are enclosed within this pattern and copy it. The two innermost ribs meet the two outermost ribs before it joins the prominent edge, and creates a point slightly higher up than this. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loops have an asymmetrical oval section varying in thickness and width, but all have an inner hole size of c.7mm. Unfinished rim with jagged edge and (probably) semi-circular projections opposite each other at the top of the rim above each face (but now broken off). A triangular nick appears at the top of the rim on the two joins. With loop left, there is a small and sharp dent so probably not a casting fault. Casting flashes are visible but smooth along both sides and create a jagged but blunt cutting edge. One corner of the cutting edge shows a recent break. The patina is dark green with a coppery/ silver surface showing along some ribs and one side. There are greenish ?organic deposits and blue deposits on the body (loop right). The surface is quite bumpy around the cutting edge and probably under the bronze-diseased patina (my diagnosis, not conservator!). The loop is tiny, its width thick at 7mm; 3mm gap between innermost ribs). Soil fine but darker in colour than 11-13 and slightly damp with small green inclusions. Retained.
- **859. Copper alloy socketed axe (15)**
    - **Type:** East Rudham
    - www.finds.org.uk NMS220

- **LE:** 10,5cm
- **WI:** 4,6cm
- **WE:** 141g
- **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low ridge which gives rise to a loop at the side of the body. Descending from the lower moulding are six raised ribs (1-6 respectively) in two groups of three separated by a 2-4mm gap in the centre. The two outermost ribs follow a furrow which emphasises the prominent edge of the rectangular-sectioned body. The two innermost ribs (3&4) fall steeply and then gently curve around the outer ribs (1&2 & 5&6) to join this prominent edge at a point ¾ of the way down the body. Thus the two pairs of outer ribs are enclosed within this pattern and copy it. The two innermost ribs meet the two outermost ribs before it joins the prominent edge, and creates a point slightly higher up than this. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loops have an asymmetrical oval section varying in thickness and width, but all have an inner hole size of c.7mm. Unfinished rim with jagged edge and recent-ish wear. Semi-circular projections show opposite each other at the top of the rim above each face. Casting flashes are visible but smooth along both sides, becoming especially noticeable around the rim area. The mouth moulding is not very well defined. With the loop to the left, there is a hole on the surface below the mouth mouldings, probably the result of a burst bronze bubble. Cutting edge is jagged, though probably due to recent-ish wear. One corner has been recently worn to (just) show the original patina beneath. The surface of the axe is bumpy with green and iron-coloured deposits. The metal seems almost distorted in places. (loop width 5mm, 4mm gap between innermost ribs)

- **860. Copper alloy socketed axe (16)**
  - **Type:** East Rudham
  - www.finds.org.uk NMS221
  - **LE:** 10,3cm
  - **WI:** 4,5cm
  - **WE:** 202g
  - **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low ridge which gives rise to a loop at the side of the body. Descending from the lower moulding are six raised ribs (1-6 respectively) in two groups of three separated by a 2-

4mm gap in the centre. The two outermost ribs follow a furrow which emphasises the prominent edge of the rectangular-sectioned body. The two innermost ribs (3&4) fall steeply and then gently curve around the outer ribs (1&2 & 5&6) to join this prominent edge at a point ¾ of the way down the body. Thus the two pairs of outer ribs are enclosed within this pattern and copy it. The two innermost ribs meet the two outermost ribs before it joins the prominent edge, and creates a point slightly higher up than this. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loops have an asymmetrical oval section varying in thickness and width, but all have an inner hole size of c.7mm. Unfinished rim, rather chunky, with semi-circular projections opposite each other at the top of the rim above each face (1 broken). 2 triangular nicks, appear at the top of the rim on the two joins. Casting flashes are prominent, especially noticeable around the loop area. The 2 halves of the axe seem slightly off-set. With the loop to the right, there are 3 holes on the surface along the lower mouth moulding, probably the result of burst bronze bubbles. Cutting edge shows no sign of casting flash and is bevelled on either face, reaching a smooth point. This axe is very smooth around the cutting edge and the patina is shiny and golden in colour, although the surface is bumpy and shows evidence for lots of burst bubbles, and there is also quite a lot of corrosion. Loop right, the left hand corner is heavily chipped (old) and corroded over and break lines are still visible across the corner. This axe feels a lot more robust than the others. (loop width 6mm, 3mm gap between innermost ribs)

- **861. Copper alloy socketed axe (17)**
  - **Type:** East Rudham
  - www.finds.org.uk NMS222
  - **LE:** 10,3cm
  - **WI:** 4,6cm
  - **WE:** 178g
  - **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low ridge which gives rise to a loop at the side of the body. Descending from the lower moulding are six raised ribs (1-6 respectively) in two groups of three separated by a 2-4mm gap in the centre. The two outermost ribs follow a furrow which emphasises the prominent edge of the rectangular-sectioned body. The two innermost ribs (3&4) fall steeply and then gently curve around the outer ribs (1&2 & 5&6) to join this prominent edge at a point ¾ of

the way down the body. Thus the two pairs of outer ribs are enclosed within this pattern and copy it. The two innermost ribs meet the two outermost ribs before it joins the prominent edge, and creates a point slightly higher up than this. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loops have an asymmetrical oval section varying in thickness and width, but all have an inner hole size of c.7mm. Unfinished rim with 1 semi-circular projection visible at the top of the rim. Rim squashed with 2 large cracks leading downwards from the rim edge and a c.25x11mm section broken from the side. The larger crack travels diagonally from one side, across the rim to the middle at the point where the transverse lines begin. A 6x2mm hole is present about half way along from which emerges a smaller crack. The second main crack leads from the top to the bottom of the mouth moulding with several smaller tributary cracks coming off it. Casting flashes are visible, especially around the loop area. Several lumpy bits of bronze around the rim area, probably the result of burst bronze bubbles. Cutting edge is rough and uneven with casting seem worn/ broken away. The axe has a few bumps but the actual surface appears to be relatively smooth beneath the corrosion that covers the axe. Dark green patina with areas of brown beneath. (loop width 5mm, 2mm gap between innermost ribs)

- **862. Copper alloy socketed axe (18)**
  - **Type:** East Rudham
  - www.finds.org.uk NMS223
  - **LE:** 10cm
  - **WI:** 4,3cm
  - **WE:** 189g
  - **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low ridge. The loop projects from the groove between the mouldings. Descending from the lower moulding are four raised ribs in two groups of two separated by a 10mm gap in the centre. The two outermost ribs follow a furrow which emphasises the edge of the rectangular-sectioned body, but which slightly curves. The two inner ribs follow the outer, curving behind it and then round it to join it at a point ¾ of the way down the body. These also follow the line of a furrow which precedes them from the centre. The sides of the body are more-or-less straight but flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loop is

small and thin (inside hole c.8mm long, width c.4mm) with an asymmetrical oval section. Unfinished rim with two semi-circular projections opposite each other on the inside of the rim above each face, slightly off-centre. 2 semi-circular and smooth 'gaps' appear in the rim on the loop side. Casting flashes are visible and the axe seems to be very slightly off-set. Loop broken off. Cutting edge is blunt and smooth with visible casting flash. Surface is quite lumpy in places but obscured by corrosion. Dark green patina. Loop right, there is a large dent ¼ of the way down from the mouth across the axe. This has given way to at least 2 cracks. The whole axe appears somewhat squashed and out of shape.

- **863. Copper alloy socketed axe (19)**
  - **Type:** East Rudham
  - www.finds.org.uk NMS224
  - **LE:** 7,7cm (incomplete)
  - **WI: /**
  - **WE:** 107g
  - **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low ridge which gives rise to a loop at the side of the body. Descending from the lower moulding are six raised ribs (1-6 respectively) in two groups of three separated by a 2-4mm gap in the centre. The two outermost ribs follow a furrow which emphasises the prominent edge of the rectangular-sectioned body. The two innermost ribs (3&4) fall steeply and then gently curve around the outer ribs (1&2 & 5&6) to join this prominent edge at a point ¾ of the way down the body. Thus the two pairs of outer ribs are enclosed within this pattern and copy it. The two innermost ribs meet the two outermost ribs before it joins the prominent edge, and creates a point slightly higher up than this. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loops have an asymmetrical oval section varying in thickness and width, but all have an inner hole size of c.7mm. Incomplete axe with unfinished rim and 1 semi-circular projection, quite small. Mouth moulding thinly-cast and the inside clearly shows this projection tapering at the lower mouth moulding. Loop right, there is a large part of the upper axe missing (broken away) leaving very rough, jagged edges, so probably a recent-ish break. Casting flashes are visible and rough, especially around the loop area. Loop 'hole' is impenetrable (with bronze) apart from very small gap. Surface is lumpy and corroded. Patina dark green with goldy-brown showing through. The cutting

edge is broken on a diagonal from the bottom of the transverse line pattern to c.18mm further up. Jagged recent-ish break. (loop width 5mm, 2mm gap between innermost ribs)

- **864. Copper alloy socketed axe (20)**
  - **Type:** East Rudham
  - www.finds.org.uk NMS241
  - **LE:** 10,5cm
  - **WI:** 4,6cm
  - **WE:** 206g
  - **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low ridge which gives rise to a loop at the side of the body. Descending from the lower moulding are six raised ribs (1-6 respectively) in two groups of three separated by a 2-4mm gap in the centre. The two outermost ribs follow a furrow which emphasises the prominent edge of the rectangular-sectioned body. The two innermost ribs (3&4) fall steeply and then gently curve around the outer ribs (1&2 & 5&6) to join this prominent edge at a point ¾ of the way down the body. Thus the two pairs of outer ribs are enclosed within this pattern and copy it. The two innermost ribs meet the two outermost ribs before it joins the prominent edge, and creates a point slightly higher up than this. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loops have an asymmetrical oval section varying in thickness and width, but all have an inner hole length of c.7mm. Unfinished rim with 2 semi-circular projections visible at the top of the rim, appearing as lumps on the inside surface. 2 small triangular nicks appear at the top of the rim on the two joins. Upper mouth moulding heavily set with the lower practically imperceptible, maybe non-existent, except for a small rise either side of the top of the loop. Loop left, upper mouth moulding dented in middle. Casting flashes visible, more prominent on loop side, along all joins. Cutting edge flash is lower on one half of the axe, making the actual edge blunt and 1.5mm thick where the other edge meets it. The axe surface is not smooth and a little bumpy with a goldy-brown coloured patina, though corrosion is heavy in places, especially towards the socket. With loop left there is a small and larger hole, probably the result of burst bronze bubbles, c.18mm from the cutting edge. The sides are more straight than concave, although they still flare to the cutting edge. The line decoration meets at a sharper point than 21-23. The axe is fatter than most of the others, with

a width of c.29mm below the rim. Similar to axe 8 in this respect (width c.28mm below rim -from drawing not life) and with imperceptible lower mouth moulding. Different mould. (loop width 4mm, 4mm gap between innermost ribs)

- **865. Copper alloy socketed axe (21)**
  - **Type:** East Rudham
  - www.finds.org.uk NMS242
  - **LE:** 10,7cm
  - **WI:** 4,7cm (width below rim: 2,4cm)
  - **WE:** 201g
  - **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low ridge which gives rise to a loop at the side of the body. Descending from the lower moulding are six raised ribs (1-6 respectively) in two groups of three separated by a 2-4mm gap in the centre. The two outermost ribs follow a furrow which emphasises the prominent edge of the rectangular-sectioned body. The two innermost ribs (3&4) fall steeply and then gently curve around the outer ribs (1&2 & 5&6) to join this prominent edge at a point ¾ of the way down the body. Thus the two pairs of outer ribs are enclosed within this pattern and copy it. The two innermost ribs meet the two outermost ribs before it joins the prominent edge, and creates a point slightly higher up than this. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loops have an asymmetrical oval section varying in thickness and width, but all have an inner hole length of c.7mm. Unfinished rim with 2 semi-circular projections visible at the top of the rim. 2 small triangular nicks appear at the top of the rim on the two joins. Upper mouth moulding quite chunky. Casting flashes visible and rough. Loop hole virtually filled in. The axe is slightly off-set, especially visible along the cutting edge where one half of the axe extends 1.5mm below the other creating sharp but unfinished edge. The axe surface is green and heavy with corrosion though where the patina shows through it is goldy-brown in colour. With loop left there is a 6mm long hole, probably the result of a burst bronze bubble just beside the loop. The loop has a small lump of bronze (burst bubble?) at its top where it joins the lower mouth moulding and the whole axe surface seems quite bumpy (loop width 6mm, 3mm gap between innermost ribs).
  - **Plate 43**
- **866. Copper alloy socketed axe (22)**
  - **Type:** East Rudham

- www.finds.org.uk NMS243
- **LE:** 10,7cm
- **WI:** 4,8cm (width below rim: 26mm)
- **WE:** 204g
- **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low ridge which gives rise to a loop at the side of the body. Descending from the lower moulding are six raised ribs (1-6 respectively) in two groups of three separated by a 2-4mm gap in the centre. The two outermost ribs follow a furrow which emphasises the prominent edge of the rectangular-sectioned body. The two innermost ribs (3&4) fall steeply and then gently curve around the outer ribs (1&2 & 5&6) to join this prominent edge at a point ¾ of the way down the body. Thus the two pairs of outer ribs are enclosed within this pattern and copy it. The two innermost ribs meet the two outermost ribs before it joins the prominent edge, and creates a point slightly higher up than this. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loops have an asymmetrical oval section varying in thickness and width, but all have an inner hole length of c.7mm. Unfinished rim with 2 semi-circular projections visible at the top of the rim (1 broken, the other projecting on the inside of the rim). 2 small triangular nicks appear at the top of the rim on the two joins. Upper mouth moulding far more prominent than the lower with a well-defined furrow between them. Casting flashes visible, especially non-loop side. Axe is slightly off-set. Cutting edge is blunt but rough along casting flash. Loop right, there is a small circular hole on the lower mouth moulding (?burst bubble). The axe is green with corrosion especially towards the cutting edge, while the socket end shows a silvery-brown patina. The surface is bumpy with evidence for burst bubbles squashed on the surface. Loop left, there is a spot of blue corrosion and a patch of brown. (loop width 8mm, 4mm gap between innermost ribs)

- **867. Copper alloy socketed axe (23)**
  - **Type:** East Rudham
  - www.finds.org.uk NMS244
  - **LE:** 10,3cm
  - **WI:** 4,9cm (width below rim 2,6cm)
  - **WE:** 197g
  - **Description:** A complete cast copper alloy socketed looped axe. Double mouth moulding, of which the upper is more prominent while the lower is little more than a low ridge which gives rise to a loop at the side of the body.

Descending from the lower moulding are six raised ribs (1-6 respectively) in two groups of three separated by a 2-4mm gap in the centre. The two outermost ribs follow a furrow which emphasises the prominent edge of the rectangular-sectioned body. The two innermost ribs (3&4) fall steeply and then gently curve around the outer ribs (1&2 & 5&6) to join this prominent edge at a point ¾ of the way down the body. Thus the two pairs of outer ribs are enclosed within this pattern and copy it. The two innermost ribs meet the two outermost ribs before it joins the prominent edge, and creates a point slightly higher up than this. The sides of the body are concave and flare gently to the axe's widest point at the cutting edge. The socket tapers in profile to a narrow but blunt end. The loops have an asymmetrical oval section varying in thickness and width, but all have an inner hole length of c.7mm. 23 Unfinished rim with 2 semi-circular projections visible at the top of the rim and projecting slightly inside the rim. 2 triangular lumps on the outside of the upper mouth moulding on the two joins. Upper mouth moulding quite chunky, with the lower a smooth bump, almost imperceptible. Casting flashes visible, though not prominent, down both sides though not along the cutting edge. Cutting edge blunt and pointed but smooth. Loop side, the corner of the cutting edge is bent. Dark green patina. Axe surface is bumpy which almost obscures decoration. Loop side, there is a small lump of bronze on the surface. One side is covered in corrosion; the other side has areas of corrosion, though less aggressive. The rim is pitted loop right. Blade has strong flare towards cutting edge. (loop width 5mm, 3mm gap between innermost ribs)

- **References:** Unpublished.
- **Returned to finder (the hoard was found pre Treasure Act Amendment 2002).**
- **Plates 42 and 43**

887.+888. Syderstone, Norfolk (centred on village: TF835325)

- **Axe Hoard**
- **Type:** East Rudham
- **Description:** Two cast copper alloy socketed looped axes of East Rudham type, found in association.
- **Note:** The small hoard was found pre-Treasure Act Amendment of 2002 and went back to the finder.
- **887. Copper alloy axe (1)**
  - **LE:** 10,2cm
  - **WI (blade):** 4,6cm
  - **WE:** 186,23g

        - **Description:** Cast copper alloy socketed looped axe, linear-decorated. This axe is in as-cast condition. The loop has not been punched through and the blade and sides still show their casting flashes. The surface is rough and damaged on both faces. The patina is dark grey with a slight dark green and red shimmer to it. Both faces are decorated with three slightly raised lines near the edges – and three grooves between them. They run parallel to the edges and narrow to meet just over half-way down.
    - **888. Copper alloy axe (2)**
        - **LE:** 10,99cm
        - **WI (blade):** 4,5cm
        - **WE:** 168,91g
        - **Description:** Cast copper alloy socketed looped axe, possibly part of a small hoard, together with the above. The patina is the same as above, but the surface is not as rough. The casting flashes have been smoothed down and the loop hole punched, but there is a small hole just next and beneath the loop – a casting flaw. The decoration of this axe is finer and the grooves are much more distinct and meet in a pellet on both faces. This axe, like the other one and though it is not in as-cast condition, shows no other signs of wear. It has not been sharpened or re-sharpened and although there are clearly dents and notches in the cutting edge, they do not come from chopping wood or similar woodwork or impact.
    - **References:** Gurney 1998, 184, fig. 1.
    - **Location:** Private Possession

889.-895. Watton, Norfolk (TF92620073)

- **Axe Hoard**
- **Type:** East Rudham
- **Description:** Seven cast copper alloy socketed looped axes.
- **Note:** Six axes were found in association at the same time, but the seventh, was discovered much later but in the same field strongly suggesting that it is related or was part of the Watton Hoard. Those seven axes are treated here as part of one dispersed hoard.
- **889. Copper alloy socketed axe (1)**
    - **Type:** East Rudham
    - **Norwich:** Norwich Castle Museum (1959.30.1)
    - **LE:** 10,4cm
    - **WI (cutting edge):** 4,7cm
    - **WI (socket, inner-outer):** 2,5-3,1cm
    - **LE (socket, back-front, inner-outer):** 2,8-3,35cm
    - **WE:** 178,65g
    - **Description:** Cast copper alloy socketed looped axe in as-cast condition. The loop has not been punched through and the casting seams have not been smoothed. It is decorated

with three grooves enhancing the edges of the two faces. The axe has a shiny light golden patina with dark green and grey patches.

- **890. Copper alloy axe (2)**
  - **Type:** East Rudham
  - **Norwich:** Norwich Castle Museum (1959.30.2)
  - **LE:** 10,2cm
  - **WI (cutting edge):** 4,5cm
  - **WI (socket, inner-outer):** 2,4-3,0cm
  - **LE (socket, back-front, inner-outer):** 2,6-3,2cm
  - **WE:** 217,50g
  - **Description:** Cast copper alloy socketed looped axe, fairly heavy for its size. The axe is basically in as-cast condition – with the casting seams not smoothed and a blunt cutting edge. The patina is golden-greenish with darker green patches. The decoration is slightly different from no 1: here, only two grooves for three ribs including the one on the edge.
- **891. Copper alloy axe (3)**
  - **Type:** East Rudham
  - **Norwich:** Norwich Castle Museum (1959.30.3)
  - **LE:** 10,2cm
  - **WI (cutting edge):** 4,7cm
  - **WI (socket, inner-outer):** 2,4-3,1cm
  - **LE (socket, back-front, inner-outer):** 2,4-3,3cm
  - **WE:** 172,05g
  - **Description:** Cast copper alloy socketed looped axe, very similar to no. 889. The axe has a dark golden-greenish patina with white flecks and a loop with loop hole. There is a casting flaw (hole) at the lower mouth moulding. The decoration is identical to that of axe no. 889. Unlike other axes of East Rudham type, this axe appears to have been used to some extent. It appears that at least one attempt was made to sharpen it (the marks are clearly visible) – although the axe is not sharp today. The axe has sub-rectangular mouth and a double-mouth moulding.
- **892. Copper alloy axe (4)**
  - **Type:** East Rudham
  - **Norwich:** Norwich Castle Museum (1959.30.4)
  - **LE:** 9,8cm
  - **WI (cutting edge):** 4,8cm
  - **WI (socket, inner-outer):** 2,8-3,2cm
  - **LE (socket, back-front, inner-outer):** 2,5-3,3cm
  - **WE:** 188,48g
  - **Description:** Cast copper alloy socketed looped axe with casting flaws (holes) on both faces; the cutting edge has not been sharpened. However, the casting seams have been smoothed down. The decoration is the same as in nos. 889 and 891, but much cruder.

- **893. Copper alloy axe (5)**
  - **Type:** East Rudham
  - **Norwich:** Norwich Castle Museum (1959.30.5)
  - **LE:** 10,2cm
  - **WI (cutting edge):** 4,5cm
  - **WI (socket, inner-outer):** 2,4-3,3cm
  - **LE (socket, back-front, inner-outer):** 2,1-3,3cm
  - **WE:** 185,47g
  - **Description:** Cast copper alloy socketed looped axe, very much like the other ones with a decoration similar to the nos. 889, 891 and 892. Same patina, no signs of usage and re-sharpening.
- **894. Copper alloy axe (6)**
  - **Type:** East Rudham
  - **Norwich:** Norwich Castle Museum (1959.30.6)
  - **LE:** 10,2cm
  - **WI (cutting edge):** 4,5cm
  - **WI (socket, inner-outer):** 2,5-3,2cm
  - **LE (socket, back-front, inner-outer):** 2,5-3,2cm
  - **WE:** 213,46g
  - **Description:** Cast copper alloy socketed looped axe. This is the only axe of the lot that has not only ribs, but also pellet-decoration. The axe is in as-cast condition. It has a greenish/golden patina with broad white patches on one of the faces. The decoration is identical to the decoration of nos. 889, 891-3, apart from the additional pellet at the end of the ribs.
- **Note:** Norwich Castle Museum's Bronze Age Catalogue indicates that 1 and 6 are from the same mould, but that seems impossible. However, the catalogue also assumes that no. 3 and the axe from Little Massingham are from the same mould and that seems likely.
- **895. Copper alloy axe (7)**
  - **Type:** East Rudham
  - **Norwich:** Norwich Castle Museum (1993.203.2) (very likely part of the same hoard, but found at a later date)
  - **LE:** 10,3cm
  - **WI (cutting edge):** 4,7cm
  - **WI (socket, inner-outer):** 2,4-3,1cm
  - **LE (socket, back-front, inner-outer):** 2,3-3,3cm
  - **WE:** 189,64g
  - **Description:** Cast copper alloy socketed looped axe with dark golden/brown-greyish patina. The axe has a double mouth moulding with thick upper and smaller lower moulding. The mouth is almost circular. It is decorated with one rib enhancing the edge of the faces and three others parallel to it. The two outer ones meet beneath the two central ones – it is the same pattern on all four corners. There are no clear signs of use. Some hacking marks are nevertheless visible on the cutting edge.

- **References:**
  - Cheetham 1977, 37.
  - O'Connor 1980, 422, no. 221, and 584, List 227, no. 19.
  - Thomas 1989, 282
  - Huth 1997, 275.
- **Norwich:** Norwich Castle Museum (1959.30.1-6 and 1993.203.2)
- **Plate 44**

Single finds:

896. Blackdyke, Hockwold, Norfolk (centred on Blackdyke Fm: TL693882)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 13,7cm
- **WI (cutting edge):** 5,4cm
- **WI (socket, inner-outer):** 3,3-4,25cm
- **LE (socket, back-front, inner-outer):** 4,1-4,75
- **WE:** 446,8g
- **Description:** Cast copper alloy socketed looped axe. The axe is very large and heavy and has a very exact decoration of four straight, parallel ribs on each face. There are no ribs embellishing the edges of the faces, but a pellet half way down, aligned with the others. Judging from the application of the decoration on this axe, interestingly, it may be assumed that the pellets were added to the end of the ribs after the casting process, as some of them do not 'cover' the end of the rib properly. The axe's sides are very straight, but the cutting edges was hammered and re-shaped into the slightly splayed form. Also, there are no clear signs of wear or re-sharpening marks, but the axe is very sharp still, so it must have been sharpened at some point.
- **Note:** Probably associated with another Late Bronze Age socketed axe, University of Cambridge Museum of Anthropology and Archaeology (26.244); a label inside this axe reads: 'Hockwold, probably associated, though found at different dates, 24.627 / 26.244'. The axe could not be located at the time of visit.
- **References:** Unpublished.
- **Cambridge:** University of Cambridge Museum of Anthropology and Archaeology (24.627)

897. Boughton, Norfolk (centred on village: TF705015)

- **Copper alloy socketed axe**
- **Type:** Transitional or Sompting, probably Cardiff II variant
- **Description:** Cast copper alloy socketed looped axe with diverging sides and somewhat splayed cutting edge. The double mouth moulding is probably of square section (this feature cannot be defined from the picture only). The faces are decorated with a unique decoration: 6-7 ribs (including the ribs on the edges of the faces) descend from the lower mouth moulding and fork very

close to the end. The ends of the forks meet with the end of the fork right or left next to them and altogether they are creating a pattern which looks very much like a zigzag frieze/herring bone ornament just below the long ribs. This impression is enhanced through small pellets which have been added to the points where the ribs fork and the point where the ends of two forks meet.
- **References:** Unpublished (?)
- **King's Lynn:** King's Lynn Museum

898. possibly Bressingham, Norfolk (centred on village: TM075805)
- **Copper alloy socketed axe**
- **Type:** Linear-decorated (?)
- **Note:** This axe was described as 'linear-facetted' but may well be of linear-decorated type. Cheetham (1977) does not publish an image of the axe, just a short description.
- **References:** Cheetham 1977, 25.
- **Norwich (?):** Norwich Castle Museum (?) Cheetham (1977, 25) writes: "Bulwer Collection (?)/ Fitch Collection (?); B.M. Add. MSS 23.060. f.207=Swaffham"

899. Bunwell, Norfolk (centred on village: TM125935)
- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **Description:** Cast copper alloy socketed looped axe. It is a large specimen with square mouth moulding, somewhat diverging sides and widely splayed cutting edge. The faces are decorated with three long ribs terminating in small pellets.
- **References:** Unpublished
- **Private Possession (?)** (SMR: Norfolk 10002)

900. Burgh Castle, Norfolk (centred on village: TG485045)
- **Copper alloy socketed axe**
- **Type:** Linear-decorated
- **LE:** 9,9cm
- **WI (blade):** 5,0cm
- **WI (socket, inner-outer):** 2,3-3,1cm
- **LE (socket, back-front, inner-outer):** 2,4-3,4cm
- **WE:** 221,03g
- **Description:** Cast copper alloy socketed looped axe, similar to the specimens from Syderstone (nos. 887-888) and Cringleford (nos. 842-843). It has a rough surface with dark brown/reddish patina with white and black flecks. There are no recognisable signs of wear except for deeps marks from the removal of the casting flashes and a number of hammer marks. The axe is decorated with of five thick ribs/grooves – two parallel to each edge and another, central one. It is similar to the axe from Hockwold (no. 883).

- **Note:** There is a small label attached to the inside of the socket that reads, “Probably from Burgh Castle or Lothingland, F.J.”, F.J. possibly being a former curator of the NCM.
- **References:** Unpublished.
- **Norwich:** Norwich Castle Museum (1978-262.10)
- **Plate 44**

901. Castle Acre, Norfolk (centred on village: TF815155)

- **Copper alloy socketed axe**
- **Type:** East Rudham
- **LE:** 10,1cm
- **WI (cutting edge):** 4,65cm
- **WI (socket, inner-outer):** 2,4-3,3cm
- **LE (socket, back-front, inner-outer):** 2,2-3,1cm
- **WE:** 184,14g
- **Description:** Cast copper alloy socketed looped axe with dark green-reddish patina. It is wedge-shaped and blunt. There are no signs of wear, but the casting flashes have been smoothed down. The axe is decorated with six grooves – three running parallel (slightly curved) to each of the face’s edges.
- **References:** Unpublished.
- **Norwich:** Norwich Castle Museum (1991.163)
- **Plate 45**

902. Caston, Norfolk (centred on village: TL955975)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **LE:** 10.7cm
- **WI (blade):** 6cm
- **WI (socket, inner-outer):** 3.1-3.8cm
- **LE (socket, back-front, inner-outer):** 3.0-3.6cm
- **WE:** 364g
- **Description:** Cast copper alloy socketed looped axe that looks very much like a small Tower Hill axe. It has a double-mouth moulding and the faces bear a very faded/rubbed off decoration of three ribs (4.2cm in length) terminating in small pellets. There is a hole (casting flaw) just below the loop.
- **Note:** Evans argues that the central rib does not descend from the lower mouth moulding but forks in its upper part and the two ends meet with the two outer ribs where they descend from the lower mouth moulding. That, however, does not seem to be the case with the axe from Caston in his collection in the Ashmolean, Oxford.
- **References:** Evans 1881, 121-122, fig. 131.
- **Oxford:** Ashmolean Museum (1927.2649)
- **Plate 45**

903. Hockwold-cum-Wilton, Norfolk (TL68608829)

- **Copper alloy socketed axe**

- **Type:** Linear-decorated
- **LE:** 11,2cm
- **WI (blade):** 6,0cm
- **LE(socket, outer-inner):** 3,4-2,7cm
- **WI (socket, outer-inner):** 3,2-2,3cm
- **Description:** Cast copper alloy socketed looped axe with sub-rectangular socket and large upper mouth moulding. The ribbed decoration is not very clear. The faces seem to bear one central rib and two diverging ones next to it, then on each side two with joined terminals which again join with the single ones next to the central rib. Very blurred. The axe is similar to no. 880.
- **Note:** This is probably the axe described by Cheetham (1977, 23) as Loan 1965.13, but returned to owner. According to Cheetham, the wood in the socket was identified as oak at Forest Products Research Lab.
- **References:**
  - O'Connor 1980, 584, List 227, no. 14.
  - Cheetham 1977, 23, cf. fig. 55 (not a drawing of this axe, just a comparable specimen)
- **Bury St Edmunds:** Moyse's Hall (1977-749 (06)).
- **Plate 46**

904. Hockwold-cum-Wilton, Norfolk (TL708878)

- **Copper alloy socketed axe**
- **Type:** Transitional (linear-facetted)
- **Description:** Cast copper alloy socketed looped axe with single round mouth moulding and widely-splayed cutting edge. The axe has ten facets with beaded edges.
- **References:** Unpublished
- **Private Possession (?)** (SMR: Norfolk 5468)

905. Wilton Bridge, Hockwold, Norfolk (centred on Wilton Bridge: TL724867)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **LE:** 13cm
- **WI (cutting edge):** 3,65cm
- **WI (socket, inner-outer):** 3,3-3,75cm
- **LE (socket, back-front, inner-outer):** 3,1-3,85cm
- **WE:** 324,1g
- **Description:** Large cast copper alloy socketed looped axe with square socket, double mouth moulding (thick upper and thin lower mouth moulding) and small casting flaws at the upper mouth moulding, the loop and a hole in the upper part of one of the faces. It is blunt, but with smooth sides.
- **References:** Unpublished.
- **Cambridge:** University of Cambridge Museum for Anthropology and Archaeology (31.899)
- **Plate 46**

906. Little Dunham, Norfolk (TF865125)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **Description:** Heavy cast copper alloy socketed looped axe with thick square mouth moulding and two very thin mouldings below. The sides are almost parallel and the cutting edge is only very slightly splayed. The faces are decorated with three ribs terminating in small pellets.
- **References:** Unpublished.
- **Private Possession (?)** (SMR: Norfolk 3837)

907. Little Massingham, Norfolk (TF76752305)

- **Copper alloy socketed axe**
- **Type:** East Rudham
- **LE:** 10,2cm
- **WI (blade):** 4,8cm
- **WI (socket, inner-outer):** 2,3-3,2cm
- **LE (socket, back-front, inner-outer):** 2,3-3,3cm
- **WE:** 173,39g
- **Description:** Cast copper alloy socketed looped axe with dark bronze/greenish patina. The socket is almost round and the casting seams have been smoothed down. The axe is almost identical to the axe from Castle Acre (no. 901) – apart from some damage to the edge and a slightly different decoration. The axe is linear-decorated: four ribs running parallel along each of the faces' edges, one of those ribs emphasizing the edge itself. This rib and the innermost rib join ca ¾ of the way down the axe and the two middle ribs join just above them. The axe displays signs of wear: the cutting edge is damaged and clearly shows marks of re-sharpening.
- **Note:** The socket has a small label inside that reads "SOCKETED AXE Little Massingham Purchased 143.951".
- **References:** O'Connor 1980, 582, List 227, no. 16.
- **Norwich:** Norwich Castle Museum (1951.143)
- **Plate 47**

908. Marsham, Norfolk (centred on village: TG195245)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **LE:** 11,5cm
- **WI (cutting edge):** 5,7cm
- **WI (socket, inner-outer):** 3,0-3,8cm
- **LE (socket, back-front, inner-outer):** 3,3-4,1cm
- **WE:** 304g
- **Description:** Very heavy cast copper alloy socketed looped axe, extremely worn. The patina is light turquoise greenish with black/brownish patches. It appears re-sharpened. The decoration on both faces is very difficult to make out but there may be a large

Omega-shape on the reverse, with possible circlets at the ends of the diagonal ribs.
- **References:** Unpublished.
- **Norwich:** Norwich Castle Museum (1908.22.32)
- **Plate 47**

909. Methwold, Norfolk (centred on village: TL735945)
- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 12,8cm
- **WI (cutting edge):** 6,4cm
- **WI (socket, inner-outer):** 3,0-4,7cm
- **LE (socket, back-front, inner-outer):** 3,0-4,8cm
- **WE:** 526,365g
- **Description:** Very heavy cast copper alloy socketed looped axe with scratchy surface and dark muddy brown patina. It is undamaged, but there is a small casting flaw (a hole in the side opposite the loop). The mouth is of sub-rectangular shape and has a double mouth moulding with a thick upper and thinner lower mouth moulding. The decoration consists of five ribs on each face ending in a pellet with an additional pellet just below. The cutting edge was not sharpened; the only signs of wear are deep nicks and dents in the cutting edge which suggest the use as a hammer or other 'blunt' tool, or else, 'intentional destruction of the tool'. Also, there are hammer marks that have left dents in the surface.
- **Note:** This decoration is extremely similar to that on the axes from Boston (Lincolnshire, no 838), Bottisham Lode (Cambridgeshire, no. 84) and Outney Common (Suffolk, no. 986).
- **References:** Unpublished.
- **London:** British Museum (WG 1992)
- **British Museum Register, Greenwell Collection:** "Copper alloy socketed celt, similar, three ribs with double dots, loop, L: 5", Methwold, Norfolk, 1894."
- **Plate 47**

910. London Rd (Street?), Norwich, Norfolk (centred on London St, Norwich Centre: TG230086)
- **Copper alloy socketed axe**
- **Type:** Transitional
- **LE:** 9,5cm
- **WI (cutting edge):** 5,4cm
- **WI (socket, inner-outer):** 2,4-3,1cm
- **LE (socket, back-front, inner-outer):** 2,5-3,25cm
- **WE:** 139,19g
- **Description:** Cast copper alloy socketed looped axe with rough surface and patchy light turquoise/dull golden brown patina. The axe has a circular, almost oblong double mouth moulding and a small spurred loop. The cutting edge is, compared to the body, wide and splayed and very thin, although no re-sharpening marks

are visible. The axe is facetted and has a decagonal cross-section (if the sides are considered to have two “facets” each (separated by the casting seam)). The casting seams have been smoothed down and are now undistinguishable from the ribs that are aligned with the edges of the faces.
- **Note:** Apart from the label that reads “Norwich”, there are very faint, but big lettered words written on the lower part of one of the faces. It is possibly that they read “London St, Norwich”. However, the register does not verify the Street.
- **References:** O'Connor 1980, 584, List 227, no. 17.
- **London:** British Museum (WG 2000)
- **British Museum Register, Greenwell Collection:** “Norwich”
- **Plate 47**

911. Oxborough, Norfolk (TL726997)
- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **Description:** Large cast copper alloy socketed looped axe with single square mouth moulding, straight sides and splayed cutting edge. The decoration has been partly rubbed of, but is unique among the corpus of Early Iron Age socketed axes: The faces are decorated with four thin ribs terminating in pellets with another row of small pellets above the last. Between the ribs is a large crisscross pattern of which, according to the drawing stored in the Sites and Monuments Record, only two crosses survive (between the first and third rib, crossing over the second).
- **References:** Unpublished.
- **Private Possession (?)** (Sites and Monuments Record: Norfolk unreg.)

912. Oxborough, Norfolk (centred on village: TF745015)
- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **Description:** Plain socketed axe with large sub-rectangular mouth moulding and a smaller second moulding underneath. The loop is slightly splayed. The upper part of the face is narrow, but the sides diverge and the cutting edge is splayed.
- **References:** Unpublished
- **Private Possession (?)** (Sites and Monuments Record: Norfolk 29263)

913. South Acre, Norfolk (TF812137)
- **Copper alloy socketed axe**
- **Type:** East Rudham
- **References:** Unpublished.
- **King’s Lynn:** King’s Lynn Museum (KL 60.977 (A.1080)), Sites and Monuments Record: Norfolk 15722

914. Stalham, Norfolk (centred on village: TG375255)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **LE:** 12,3cm
- **WI (cutting edge):** 5,7cm
- **WI (socket, inner-outer):** 2,8-4,0cm
- **LE (socket, back-front, inner-outer):** 3,1-4,3cm
- **WE:** 413,33g
- **Description:** Very corroded cast copper alloy socketed looped axe. Its patina is now metallic gold and red, the surface is rough and much corroded. The socket has a sub-rectangular double mouth moulding. The loop is broken and there seems to be a casting flaw (hole) on one of the faces. The chemical treatment (probably for bronze disease) of the axe's surface has turned casting seams into grooves and it seems that this is what happened to the three ribs on the two faces, too. It is unclear if ribs terminated in pellets, but it seems likely.
- **Note:** The museum records indicate that the axe has a 'rib-and-pellet' decoration. However, at some point in the past, the axe seemed to have been inappropriately treated for bronze disease and the original surface was destroyed in the process.
- **References:** Cheetham 1977, 24, fig. 55.
- **Norwich:** Norwich Castle Museum (1933.79)
- **Plate 48**

915. Thetford, Norfolk (centred on town: TL875835)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **Description:** Large cast copper alloy socketed looped axe with square mouth moulding and almost straight sides that diverge into a somewhat splayed cutting edge. Both faces are decorated with five long ribs terminating in pellets. The outer ribs coincide with the edges of the faces.
- **References:** Unpublished
- **Private Possession (?)** (Sites and Monuments Record: Norfolk 29114)

916. Tittleshall, Norfolk (centred on village: TF895215)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **Description:** Plain socketed axe with sub-rectangular heavy double mouth moulding, diverging sides and widely splayed cutting edge.
- **References:** Unpublished
- **Private Possession (?)** (Sites and Monuments Record: Norfolk 1803)

917. Whittington, Norfolk (centred on village: TL719993)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant

- **Description:** Large specimen with thick square upper mouth moulding and a thinner one underneath, parallel sides and an only slightly curved cutting edge. The faces are decorated with five long ribs terminating in small pellets. The two outer ribs coincide with the edges of the faces.
- **References:** Unpublished
- **Norwich:** Norwich Castle Museum (L 1966.1) (Sites and Monuments Record: Norfolk 11254)

918. Wood Norton, Norfolk (centred on village: TG015285)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 13,3cm
- **WI (blade):** 5,1cm
- **WI (socket, inner-outer):** 3,1-4,4cm
- **LE (socket, back-front, inner-outer):** 3,3-4,3cm
- **WE:** 450g
- **Description:** Cast copper alloy socketed looped axe with dull light turquoise patina with dark turquoise and golden patches and white flecks. The axe is very long and heavy and the blade fairly narrow compared to the axe's length. The edges are almost parallel. The socket's outer edge is a square, while its inner edge is circular. The axe has a very thick upper mouth moulding and a very thin one directly underneath – then a bulky collar follows (1,3cm in length), which seems most unusual. The four ribs which start off from the bulky collar terminate in pellets. The ribs are ca. 4,7cm long. Signs of wear are difficult to identify.
- **References:** Unpublished.
- **Norwich:** Norwich Castle Museum (378.976)
- **Plate 48**

919. "Norfolk" (possibly from near Horstead: TG265195)

- **Copper alloy socketed axe**
- **Type:** Linear-decorated
- **LE:** 9cm
- **WI (cutting edge):** 4,2cm
- **WI (socket, inner-outer):** 2,6-3,1cm
- **LE (socket, back-front, inner-outer):** 2,5-3,1cm
- **WE:** 126,60g
- **Description:** Cast copper alloy socketed looped axe with dark golden/brown/greenish patina. It is very worn and the surface much corroded. The cutting edge is badly damaged – as if the axe was used to cut up some very hard material. The loop is extremely thin. It has a raised rib on the two edges surrounding the faces and three ribs parallel to each edge – the ribs, however, are mainly defined by the deep grooves separating them.
- **Note:** The text inscribed on the axe reads "58.38 (I) (no. 278 in 1909 Cat.), Horstead Hd" – which may suggest that it was part of

a hoard. However Cheetham rejects this as the evidence for the context is unsatisfactory (1977, 24).
- **References:** Cheetham 1977, 24
- **Norwich:** Norwich Castle Museum (1838.59.2)
- **Plate 48**

920. "Norfolk"
- **Copper alloy socketed axe**
- **Type:** Linear-decorated
- **LE:** 9,2cm
- **WI (cutting edge):** 3,7cm
- **WI (socket, inner-outer):** 2,3-3,0cm
- **LE (socket, back-front, inner-outer):** 2,3-3,0cm
- **WE:** 127,91g
- **Description:** Badly damaged cast copper alloy socketed looped axe of poor craftsmanship. This specimen is fairly small and very worn. It shows damage from the plough (?) and bears many scratch marks on the surface. It has been attempted to smoothen the casting seams and to emphasize the groove between the two mouth mouldings. The mouth is circular and the loop smallish and covered in scratches. The grooves near the cutting edge suggest that it has been used and re-sharpened. The patina is very dark brown-greenish with some golden flecks. The axe does not seem to have ribs emphasizing its edge, but rather two superficial grooves that mock the appearance of a rib on the edge and another one right next to it.
- **References:** Cheetham 1977, 24.
- **Norwich:** Norwich Castle Museum (1894.76.783)
- **Plate 49**

Northamptonshire:

Hoards: none

Single finds:

1393. Preston Capes, Northamptonshire (SP5656854008)
- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **LE:** 13,5cm
- **WI (cutting edge):** 5,5cm
- **Description:** Very worn cast copper alloy socketed looped axe. The axe is in poor condition and requires conservation. The axe is complete, but some of the blade looks worn away, possibly by wear and re-sharpening. The surface shows large patches of corrosion and much of the decoration is worn away. The axe has a double-mouth moulding with a thicker upper and thinner lower mouth moulding. The casting seams at the top and along the

sides are still visible and comparatively prominent. The socket/mouth moulding is sub-rectangular or back-to-front in shape and the upper edge looks worn. The decoration on both faces seems to be the same: there is a large pellet-in-two circlets just below the lower mouth moulding with two more below it, towards the centre of the axe's body. The surface around the circlets is very worn, but it seems as if the outer circlets were connected by ribs, possibly two ribs connecting the upper corners of the faces with the lower circlets and possibly ribs connecting the lower circlets with the central circlet at the top. However, the surface is too worn to be certain.

- **References:** Portable Antiquities Scheme database: www.finds.org.uk: Find ID: LANCUM-563E82
- **Returned to finder**
- **Plate 144**

921. Stoke Bruerne, Northamptonshire (centred on village: SP745495)

- **Copper alloy socketed axe**
- **Type:** Transitional: either facetted or linear-decorated
- **References:**
  - Kennett 1975, 14.
  - O'Connor 1980, 584, List 227, no. 22.
- **Northampton:** Northampton Museum (ZL 6)

Northumberland:

Hoards: none

Single finds: none

Nottinghamshire:

Hoards: none

Single finds:

922. Attenborough, Nottinghamshire (SK5031)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant (?)
- **Description:** Large cast copper alloy socketed looped axe with vertical ribs and with diagonals between the ribs (Scurfield does not offer a drawing, but it seems likely that the axe is similar to the one from, e.g. Holme Pierrepont with the chevron or herring bone pattern between the ribs creating a lattice pattern).
- **References:** Scurfield 1997, 41, no. 1.
- **Nottingham:** Nottingham University Museum (Loan)

923. Gotham area, Nottinghamshire (centred on Gotham: SK535305)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant (?)
- **Description:** Large cast copper alloy socketed looped axe with single sub-rectangular mouth moulding, almost straight sides and splayed cutting edge. The faces are decorated with three unevenly spaced ribs terminating in circlets with a central pellet.
- **Note:** Found in two parts by two different people, two or three weeks apart.
- **References:** Alvey 1983, 82, fig. 1.3.
- **Private Possession**

924. Greasley, Nottinghamshire (SK491482)

- **Copper alloy socketed axe**
- **Type:** Transitional
- **Description:** Cast copper alloy socketed looped axe. The axe has a single sub-rectangular mouth moulding and slightly diverging sides which terminate in a splayed cutting edge. The faces are undecorated, but the edges of the faces are ornamented with a single deep groove.
- **Note:** The axe was found "encased in a ¼ in- ½ in layer of cream-coloured plaster-like material, with a uniform, hard texture, which was only removed, it is said, with difficulty by means of a penknife. Presumably this casting was the remains of the mould." (Peacock 1966, 36)
- **References:** Peacock 1966, 36, fig. 1.3.
- **Private Possession**

925. Holme Pierrepont, Nottinghamshire (approx. SK627397)

- **Copper alloy socketed axe**
- **Type:** Linear-decorated
- **Description:** Cast copper alloy socketed looped axe with linear-decorated along the sides of the faces. Evidence for wear and use; very widely splayed cutting edge.
- **Note:** The axe was found with remains of a wooden haft.
- **References:**
  - MacCormick 1966, 36, fig. 7.10.
  - O'Connor 1980, 584, List 227, no. 23.
  - Scurfield 1997, 53, no. 61.
- **Nottingham:** Nottingham Castle Museum (66.160)

926. Holme Pierrepont, Nottinghamshire (SK627397)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **Description:** Cast copper alloy socketed looped axe in fine condition, with square mouth moulding and five ribs terminating in pellets on each side. On one face a chevron design runs between

all of the ribs and forms a lattice-pattern. On the other side, the decoration runs only between the two centre pairs.
- **References:**
  - MacCormick 1974, 42.
  - Scurfield 1997, 53, no. 63, fig. 14.63.
- **Nottingham:** Nottingham Castle Museum (67.159).

927. Holme Pierrepont, Nottinghamshire (SK627397)
- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **Description:** Cast copper alloy socketed looped axe. However, only the lower part of the axe and part of the survive. The surviving part of the axe, however, is decorated with ribs and a chevron design between them.
- **References:** MacCormick 1966, 36, fig. 7.11.
- **Nottingham:** Nottingham Castle Museum (66.161)

928. Holme Pierrepont, Nottinghamshire (SK614392)
- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **Description:** Cast copper alloy socketed looped axe. The axe is decorated with five ribs forming a capital 'M', three circlets with central pellets forming the terminals.
- **Note:** The axe was crushed when it was found in a gravel pit near Holme Cut in the early 1960s.
- **References:**
  - MacCormick 1964, 23.
  - Scurfield 1997, 53, no. 57.
- **Private Possession**

929. Hoveringham, Nottinghamshire (SK6946)
- **Copper alloy socketed axe**
- **Type:** Transitional
- **Description:** Cast copper alloy socketed looped axe. The axe has an oval/rectangular double mouth moulding, diverging sides and a splayed cutting edge. The loop is thin and the mouth might be slightly miscast.
- **Note:** This axe is very similar to two axes from the Llyn Fawr hoard (nos. 1277 and 1278).
- **References:** Scurfield 1997, 55, no. 76, fig. 17.76.
- **Nottingham:** Nottingham Castle Museum (HHL-1 (Loan))

930. Shelford, Nottinghamshire (SK661428)
- **Copper alloy socketed axe**
- **Type:** Transitional
- **LE (remaining):** 10,5cm
- **WI (cutting edge):** 5,8cm
- **WI (socket, inner-outer):** 3,2-4,0cm
- **LE (socket, back-front, inner-outer):** 2,05-2,15cm

- **WE:** 316,9g
- **Description:** Cast copper alloy socketed looped axe of dull copper alloy colour with shiny dark reddish brown patina. The axe has a miscast rectangular mouth moulding with a misshapen mouth-moulding. The surface is very shiny and smooth and the casting seams have been smoothed down. The two faces are decorated with several thin ribs ending in very small flat pellets which have partly been removed or smoothed down in the process of polishing and re-sharpening. There are three ribs approximately 5,2cm in length on one face and five unevenly spaced ribs approximately 5,5cm in length on the other side. It is possible that the latter five ribs end in a double-pellet with a space of 6-7mm in between them. On one of the faces, possibly more recent, rough sharpening marks almost obliterate some much finer, probably older re-sharpening marks
- **Note:** The clear, very rough re-sharpening marks on the lower part of the axe and the blade probably come from a more recent attempt at sharpening the axe. A tear in the side of the mouth probably suggests that it was, at one point, attempted to haft it, that is, to make the axe useable. As could be expected, the tear appeared on the thinner and weaker-looking half of the misshapen mouth moulding: It looks like an attempt was made to force a handle into the socket of the axe and in that process, the weaker side of the mouth moulding ripped.
- **References:** Scurfield 1997, 54, no. 73, fig. 17.73.
- **London:** British Museum (WG 1996)
- **British Museum Register, Greenwell Collection:** “Shelford, Nottinghamshire”
- **Plate 49**

931. South Scarle, Nottinghamshire (centred on village: SK845645)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **Description:** Cast copper alloy socketed looped axe with a sub-rectangular double-mouth moulding, fairly straight sides and a hardly splayed cutting edge. It is decorated on each face with four ribs terminating in pellets. The three spaces between the four ribs, just above the pellets, are filled with a cross each. There are additional pellets on the points where the bars cross and where they meet with the long ribs.
- **Note:** The axe was offered at a sale in Alford. Apparently, it comes from the same mould as an axe in Lincoln Museum from the River Trent (Marjoram 1974, 19).
- **References:**
  - Marjoram 1974, 19, fig. 1.5.
  - Davis 1999, 38, no. 30.
- **Nottingham:** Nottingham Castle Museum (?)

Oxfordshire:

Hoards:

932.-953. Tower Hill, Ashbury, Oxfordshire (SU283838)

- **Axe Dominated Hoard**
- **Type:** Sompting, Tower Hill variant
- **Description:** 82 metal objects: 22 socketed axes (mostly plain, two decorated: one with a three horizontally aligned pellets, another one with rib-and-pellets), 6 larger and numerous smaller fragments of decorated and plain axes, metalworking debris, harness(?) fittings and ornaments (rings).

932. Copper alloy socketed axe (PP1)

- **Type:** Sompting, Tower Hill variant
- **LE:** 12,75cm
- **WI (cutting edge):** 6,4cm
- **WI (socket, inner-outer):** 3,2-3,8cm
- **LE (socket, back-front, inner-outer):** 4,0-4,7cm
- **WE:** 375g
- **Description:** Cast copper alloy socketed looped axe with somewhat obscure decoration. Probably decorated with five long ribs terminating in pellets, on one of the face, possibly forming an 'M'.. There is a hole in the face with the 'M'- in the centre just below the central rib and pellet. Straight from the mould, never used, casting flashes still intact.
- **Plate 50**

933. Copper alloy socketed axe (PP2)

- **Type:** Sompting, Tower Hill variant
- **LE:** 13,0cm
- **WI (cutting edge):** 6,6cm
- **WI (socket, inner-outer):** 3,1-3,85cm
- **LE (socket, back-front, inner-outer):** 3,5-4,25cm
- **WE:** 426g
- **Description:** Cast copper alloy socketed looped axe. Undecorated, double mouth moulding, used and re-sharpened. Axe was wedge-shaped, but the blade was hammered into splayed shape. Hammer marks and what looks like pin-prick marks on the surface.
- **Plates 50, 51 and 52**

934. Copper alloy socketed axe (PP3)

- **Type:** Sompting, Tower Hill variant
- **LE:** 12,9cm
- **WI (cutting edge):** 6,65cm
- **WI (socket, inner-outer):** 3,3-3,95cm
- **LE (socket, back-front, inner-outer):** 3,3-4,25cm
- **WE:** 383g
- **Description:** Cast copper alloy socketed looped axe. Undecorated and slightly cruder than no. 933, the loops is slightly

spurred, the casting seams at the sides are still intact, but the axe has been used and re-sharpened.
- **Plates 51, 52 and 53**

935. Copper alloy socketed axe (PP4)
- **Type:** Sompting, Tower Hill variant
- **LE:** 12,5cm
- **WI (cutting edge):** 6,7cm
- **WI (socket, inner-outer):** 3,1-3,7cm
- **LE (socket, back-front, inner-outer):** 3,3-4,3cm
- **WE:** 406g
- **Description:** Cast copper alloy socketed looped axe with sharp blade. Shows evidence for re-sharpening and wear. Casting seams along the sides and on top of the mouth are smooth.
- **Plates 51, 52 and 53**

936. Copper alloy socketed axe (PP5)
- **Type:** Sompting, Tower Hill variant
- **LE:** 12,7cm
- **WI (cutting edge):** 6,2cm
- **WI (socket, inner-outer):** 3,2-4,2cm
- **LE (socket, back-front, inner-outer):** 3,6-4,2cm
- **WE:** 406g
- **Description:** Cast copper alloy socketed looped axe in as cast condition. Casting flaw in the loop which is not complete, casting seams and webs still intact, but there was some post-moulding treatment: the lower part of the blade has been hammered (hammer marks).
- **Note:** Same mould as axe PP11 (no. 942)?
- **Plates 53-55**

937. Copper alloy socketed axe (PP6)
- **Type:** Sompting, Tower Hill variant
- **LE:** 12,6cm
- **WI (cutting edge):** 6,7cm
- **WI (socket, inner-outer):** 3,35-3,9cm
- **LE (socket, back-front, inner-outer):** 3,3-4,3cm
- **WE:** 407g
- **Description:** Cast copper alloy socketed looped axe with double mouth moulding, but second mouth moulding only hardly visible. More worn than the axes above, still sharp, many re-sharpening marks, some hammer marks on the faces, possibly evidence to sharpen it again.
- **Plate 56**

938. Copper alloy socketed axe (PP7)
- **Type:** Sompting, Tower Hill variant
- **LE:** 12,9cm
- **WI (cutting edge):** 6,6cm
- **WI (socket, inner-outer):** 3,4-3,9cm
- **LE (socket, back-front, inner-outer):** 3,8-4,3cm
- **WE:** 378g

- **Description:** Cast copper alloy socketed looped axe with very bulbous upper mouth moulding, casting seams at the sides only crudely taken off, blade shows wear and marks of re-sharpening
- **Plate 56**

939. Copper alloy socketed axe (PP8)

- **Type:** Sompting, Tower Hill variant
- **LE:** 13,0cm
- **WI (cutting edge):** 6,6cm
- **WI (socket, inner-outer):** 3,1-3,7cm
- **LE (socket, back-front, inner-outer):** 3,6-4,4cm
- **WE:** 434g
- **Description:** Cast copper alloy socketed looped axe decorated with not very pronounced 'ribs' along the edges of the face, but very, very thin; hole in one of the faces, three dots just under lower mouth moulding, still fairly sharp and not much evidence of wear – almost no re-sharpening marks. Edge is very smooth.
- **Plate 50**

940. Copper alloy socketed axe (PP9)

- **Type:** Sompting, Tower Hill variant
- **LE:** 12,7cm
- **WI (cutting edge):** 6,4cm
- **WI (socket, inner-outer):** 2,9-3,8cm
- **LE (socket, back-front, inner-outer):** 3,1-3,95cm
- **WE:** 459g
- **Description:** Cast copper alloy socketed looped axe with untrimmed casting seams. Axe has been used and re-sharpened, though there is not much wear. No obvious hammer marks.
- **Plate 57**

941. Copper alloy socketed axe (PP10)

- **Type:** Sompting, Tower Hill variant
- **LE:** 11,8cm
- **WI (cutting edge):** 6,75cm
- **WI (socket, inner-outer):** 3,4-3,9cm
- **LE (socket, back-front, inner-outer):** 3,4-4,2cm
- **WE:** 412g
- **Description:** Cast copper alloy socketed looped axe with pronounced hammer marks on blade (blade very splayed now), re-sharpened and used, but only slightly worn, casting seams at sides trimmed, blade still very sharp.
- **Plate 56**

942. Copper alloy socketed axe (PP11)

- **Type:** Sompting, Tower Hill variant
- **LE:** 12,7cm
- **WI (cutting edge):** 6,2cm
- **WI (socket, inner-outer):** 3,2-3,7cm
- **LE (socket, back-front, inner-outer):** 3,2-4,2cm
- **WE:** 416g

- **Description:** Cast copper alloy socketed looped axe in as-cast condition with seams and webs still intact, there are some hammer marks on casting seams and faces.
- **Plates 53-55**

943. Copper alloy socketed axe (PP12)

- **Type:** Sompting, Tower Hill variant
- **LE:** 12,7cm
- **WI (cutting edge):** 7,05cm
- **WI (socket, inner-outer):** 3,3-4,2cm
- **LE (socket, back-front, inner-outer):** 3,4-4,5cm
- **WE:** 442g
- **Description:** Cast copper alloy socketed looped axe with very bulbous upper mouth moulding, used and signs of re-sharpening, blade crescentic but not much wear.
- **Plate 57**

944. Copper alloy socketed axe (PP13)

- **Type:** Sompting, Tower Hill variant
- **LE:** 13,1cm
- **WI (cutting edge):** 6,7cm
- **WI (socket, inner-outer):** 3,1-3,6cm
- **LE (socket, back-front, inner-outer):** 3,2-4,4cm
- **WE:** 430g
- **Description:** Cast copper alloy socketed looped axe with a blade that is a little less splayed and does not show much wear, but is still sharp and re-sharpening marks, hammer marks on upper part of the blade, loop slightly spurred
- **Plate 58**

945. Copper alloy socketed axe (PP14)

- **Type:** Sompting, Tower Hill variant
- **LE:** 12,7cm
- **WI (cutting edge):** 6,3cm
- **WI (socket, inner-outer):** 3,0-3,65cm
- **LE (socket, back-front, inner-outer):** 3,2-4,35cm
- **WE:** 404g
- **Description:** Cast copper alloy socketed looped axe in as cast condition, casting seams/webs still intact, hammer marks on lower part of the blade, colour: very shiny gold.
- **Plates 54, 55, 58, 59 and 60**

946. Copper alloy socketed axe (PP15)

- **Type:** Sompting, Tower Hill variant
- **LE:** 12,3cm
- **WI (cutting edge):** 7,05cm
- **WI (socket, inner-outer):** 2,8-3,55cm
- **LE (socket, back-front, inner-outer):** 3,2-4,1cm
- **WE:** 357g
- **Description:** Cast copper alloy socketed looped axe, its blade very splayed but not much used (?), clear re-sharpening marks, casting seams still intact along the sides, hole in one of the sides, just below the loop.

- **Plate 56**

947. Copper alloy socketed axe (PP16)

- **Type:** Sompting, Tower Hill variant
- **LE:** 13,3cm
- **WI (cutting edge):** 6,4cm
- **WI (socket, inner-outer):** 2,9-3,6cm
- **LE (socket, back-front, inner-outer):** 3,5-4,5cm
- **WE:** 428g
- **Description:** Cast copper alloy socketed looped axe, its blade not much splayed and not much used? There are hammer marks on the lower part of the blade and it is very smooth, very shiny and golden, casting seams along the sides not quite as prominent.
- **Plate 61**

948. Copper alloy socketed axe (PP17)

- **Type:** Sompting, Tower Hill variant
- **LE:** 12,2cm
- **WI (cutting edge):** 6,8cm
- **WI (socket, inner-outer):** 2,8-3,65cm
- **LE (socket, back-front, inner-outer):** 3,4-4,35cm
- **WE:** 428g
- **Description:** Cast copper alloy socketed looped axe in as-cast condition, very splayed cutting edge, casting seams and webs still intact, very bright shiny golden colour, lower mouth moulding is not very prominent
- **Plate 61**

949. Copper alloy socketed axe (PP18)

- **Type:** Sompting, Tower Hill variant
- **LE:** 12,7cm
- **WI (cutting edge):** 6,35cm
- **WI (socket, inner-outer):** 2,9-3,65cm
- **LE (socket, back-front, inner-outer):** 3,25-4,15cm
- **WE:** 403g
- **Description:** Cast copper alloy socketed looped axe with trimmed casting seams, hammer marks on the lower part of the blade, axe is still sharp and has clear re-sharpening marks, looks a little more used than most of the others; there is a casting flaw (hole) below the loop.
- **Plate 57**

950. Copper alloy socketed axe (PP19)

- **Type:** Sompting, Tower Hill variant
- **LE:** 12,9cm
- **WI (cutting edge):** 6,85cm
- **WI (socket, inner-outer):** 3,0-3,65cm
- **LE (socket, back-front, inner-outer):** 3,2-4,2cm
- **WE:** 397g
- **Description:** Cast copper alloy socketed looped axe with very pronounced, sharp casting seams, hammer marks on the lower part of the faces and very clear signs of re-sharpening and slight signs of wear

- **Plate 58**

951. Copper alloy socketed axe (**PP20)**

- **Type:** Sompting, Tower Hill variant
- **LE:** 12,9cm
- **WI (cutting edge, one corner is broken off):** 6,2cm
- **WI (socket, inner-outer):** 3,5-4,0cm
- **LE (socket, back-front, inner-outer):** 3,5-4,6cm
- **WE:** 409g
- **Description:** Cast copper alloy socketed looped axe with very bulbous upper mouth moulding, hammer marks on lower part of the blade, blade slightly splayed, edges slightly raised, but no clear ribs, one corner is missing, re-sharpened but not much used (?)
- **Plate 57**

952. Copper alloy socketed axe (PP21)

- **Type:** Sompting, Tower Hill variant
- **LE:** 12,25cm
- **WI (cutting edge):** 6,2cm
- **WI (socket, inner-outer):** 3,1-3,65cm
- **LE (socket, back-front, inner-outer):** 3,2-4,25cm
- **WE:** 409g
- **Description:** Cast copper alloy socketed looped axe in as-cast condition, with thin sharp casting seams which are still intact, hammer marks on the lower part of the blade
- **Plates 54, 55, 58, 59 and 60**

953. Copper alloy socketed axe (PP65)

- **Type:** Sompting, Tower Hill variant
- **LE:** 12,7cm
- **WI (cutting edge):** 6,3cm
- **WI (socket, inner-outer):** 3,1-3,7cm
- **LE (socket, back-front, inner-outer):** 3,2-4,15cm
- **WE:** 430g
- **Description:** Cast copper alloy socketed looped axe. Corners of blade worn off or hammered into round shape (possibly blunted?), hammer marks on the lower part of the blade. Blade looks worn and has been re-sharpened several times.
- **Plates 50-52**
- **Copper alloy axe fragment (PP51)**
  - **LE:** 5,55cm
  - **WE:** 26g
  - **Description:** Fragment of axe showing part of a single mouth moulding and vertical incisions. Flattened decoration?
- **Copper alloy axe fragment (PP50)**
  - **LE:** 4,4cm
  - **WE:** 18g
  - **Description:** Part of body of socketed axe with zigzag or chevron decoration.
- **Copper alloy axe fragment (PP34)**

        - **LE:** 3,85cm
        - **WE:** 40g
        - **Description:** Mouth of socketed axe with single mouth moulding, prob. undecorated.
    - **Copper alloy axe fragment (PP53)**
        - **LE:** 3,15cm
        - **WE:** 13g
        - **Description:** Mouth fragment of socketed axe, decorated with thin ribs that curve slightly outwards – similar to linear-decorated axe decoration, parallel to the edge of the face.
    - **Copper alloy axe fragment (PP67)**
        - **LE:** 2,7cm
        - **WE:** 11g
        - **Description:** Fragment of the edge of the face of a socketed axe – three ribs of the ribbed decoration are still intact: one rib on top of the edge and another two on the remainders of the face. The ribs on the edge and the one next to it end in a very small pellet, the other rib is incomplete.
    - **Copper alloy axe fragment (PP70)**
        - **LE:** 3,25cm
        - **WE:** 16g
        - **Description:** Fragment of edge of face of socketed axe with remainder of rib-and-roundel ornament.
    - **Note:**
        - Some of the axes come from the same mould
        - Settlement evidence nearby
    - **References:**
        - Coombs, Northover and Maskall 2003. 'Tower Hill Axe Hoard'. In: Miles *et al.* 2003. Uffington White Horse and its landscape. Oxford Archaeological Unit, 203-225.
    - **Private Possession (PP1-PP82)**
    - **Plates 49-61**

954. Compton Beauchamp, Oxfordshire (SU280865)

- **Axe Dominated Hoard**
- **Type:** Sompting, Tower Hill variant.
- **Description:** One plain Tower Hill axe and a fragment of casting sprue.
- **References:** Unpublished.
- **Location:** Private Possession (recorded in Salisbury Museum)

Single finds:

955. Beckley, Oxfordshire (centred on village: SP565105)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **LE:** 11.5cm

- **WI (blade):** 6.5cm
- **WI (socket, inner-outer):** 3.2-4.0cm
- **LE (socket, back-front, inner-outer):** 3.3-4.2cm
- **WE:** 439g
- **Description:** Heavy cast copper alloy socketed looped axe. Undecorated. It has broad sides and has an almost hexagonal cross-section. The blade is widely splayed.
- **References:** Unpublished.
- **Oxford:** Ashmolean Museum (1955.70)
- **Plate 62**

956. River Thames at Buscot, Oxfordshire (centred on Thames at Buscot: SU231981)

- **Iron socketed axe**
- **Type:** Iron socketed axe
- **References:** Barclay *et al.* 1995, 417-8.
- **Oxfordshire Museums:** OXCMS 1994.131.1

957. Westmoor, Clifton Hampden, Oxfordshire (SU547958)

- **Copper alloy socketed axe**
- **Type:** Transitional (linear-facetted)
- **References:** O'Connor 1980, 584, List 227, no. 24.
- **Oxford:** Ashmolean Museum (1950.238)

958. Middle Hill, Islip, Oxfordshire (centred on Middle Hill: SP5312)

- **Copper alloy socketed axe fragment**
- **Type:** Transitional (linear-facetted)
- **WI (blade):** 5.7cm
- **WE:** 62g
- **Description:** Blade fragment of copper alloy facetted or linear-facetted socketed axe.
- **References:** Unpublished.
- **Oxford:** Ashmolean Museum (1924.664a)
- **Plate 62**

959. Magdalen Bridge, Oxford, Oxfordshire (centred on Magdalen Bridge: SP521061)

- **Copper alloy socketed axe**
- **Type:** Armorican (small)
- **LE:** 7.5cm
- **WI (blade):** 2.5cm
- **WI (socket, inner-outer):** 1.6-2.1cm
- **LE (socket, back-front, inner-outer):** 1.4-1.9cm
- **WE:** 76g
- **Description:** Small cast copper alloy socketed looped axe. Undecorated. Clay core still inside. The upper part of the axe has been slightly squashed.
- **References:** Leeds 1939, 250, fig. 3e.
- **Oxford:** Ashmolean Museum (NC363)

- **Plate 62**

960. Wallingford Bridge, Oxfordshire (SU610894)

- **Copper alloy socketed axe**
- **Type:** Linear-decorated
- **Description:** Cast copper alloy socketed looped axe with a round broad mouth moulding and a smaller second moulding. The faces are plain, but the edges of the faces are linear-decorated.
- **References:** Thomas 1984, 16, fig. 1.17.
- **Reading:** Reading Museum (1272.64)

961. Wallingford, Oxfordshire (SU610894)

- **Copper alloy socketed axe fragment**
- **Type:** Transitional (facetted or linear-facetted)
- **LE:** 11,2cm
- **WI (blade):** 4.9cm
- **WI (socket, inner-outer):** 2.5-3.0cm
- **LE (socket, back-front, inner-outer):** 2.0-2.7cm
- **WE:** 201g
- **Description:** Blade fragment of socketed axe, very likely a transitional linear-facetted axe.
- **References:** Unpublished.
- **Oxford:** Ashmolean Museum (1927.2700)

962. Wallingford Bridge, Oxfordshire (SU610894)

- **Copper alloy socketed axe**
- **Type:** Transitional (probably linear-facetted)
- **Description:** According to the Thames Conservatory Board, the axe is a “Late Bronze Age type with embellished facets…” (Anon 1965-66, p. 75).
- **Note:** This may be the same axe as no. 960, as the museum object entry numbers are the same.
- **References:** Anon 1965-66, 75.
- **Reading:** Reading Museum (1272.64), Thames Conservatory Board 285.

Shropshire:

Hoards: none

Single finds:

963. Wolverley, Wem Rural, Shropshire (from finder: SJ4676031015)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **LE:** 106mm
- **WI:** 43mm
- **Thickness:** 37mm

- **WE:** 175g
- **Description:** Cast copper alloy socketed looped axe. The axe is wedge shaped in both plan and profile view, with an ovoid socket. There is a marked single strengthening collar to the mouth of the socket with the attachment loop being just below that collar, on the side seam of the axe. There are pronounced moulding seams running from the mouth to the blade tips on each side. The blade tips are slightly flared. There is also a slight 'chamfer', noticeable to each corner from the socket mouth, tapering down toward the blade. The overall condition of the axe is poor, with considerable loss of the original surface which has a dull brown patina. One side of the axe has been damaged and split, presumably in antiquity, that damage reveals how thin the walls of this axe are. The apparent fragility of this moulding might explain the lightness of this axe at just 175g. Another interesting feature of this axe is the internal moulding, which extends into the flare of the axe head. That in turn, might suggest the possibility of reducing the metal content to a minimum, in conjunction with the thin walls. This type of manufacture, with its lack of overall mass, could indicate a more 'votive' aspect, than a practical tool.
- **References:** www.finds.org.uk Find ID: CPAT-79CD04
- **Returned to finder (metal-detector find)**
- **Plate 63**

Somerset:

Hoards: none

Single finds:

964. Claverton Down, River Avon floodplain, Somerset (ST784632)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:**
  - Colquhoun 1977/78, 95, no. 84
  - Pearce 1983, no. 580, 501.
- **Taunton:** Somerset County Museum (ex Coll. Alnwick No. 227)

965. Ham Hill, Somerset (centred on Ham Hill hillfort: ST482165)

- **Copper alloy socketed axe**
- **Type:** Sompting, Figheldean Down variant
- **Description:** Large cast copper alloy socketed looped axe with almost parallel sides, slightly diverging towards the blade which is only somewhat splayed. It has a square double mouth moulding and the faces are decorated with three plain ribs.
- **References:** Colquhoun 1977/78, 95, no. 80.
- **Taunton:** Taunton Museum (22b)
- **Plate 63**

Add.: 1409. Ham Hill, North Gully, Somerset (ST479172) –

- **Settlement site**
- **Type:** Stone mould
- **Description:** Socketed gouge, leaf-shaped pegged spearhead, socketed axe with thick collar and three ribs (no. 965), stone moulds for socketed axes and socket fragment of another.
- **Notes:**
  - Pearce's drawing of the complete axe looks very much like a drawing of a Figheldean Down axe (this probably is the axe above, no. 965)
  - **1409.** The stone moulds would appear to be for the production of Llyn Fawr period axes. (Needham *et al.* 1988, 20.)
- **References:**
  - Jockenhövel 1980, Abb. 2.
  - Pearce 1983, 531, no. 748.
  - Needham *et al.* 1988, 15-21.
- **Taunton:** Somerset County Museum (31D, 35A, 22B, 22A (Walter Coll. 1901))

966. Wells, Somerset (centred on town: ST545455)

- **Copper alloy socketed axe**
- **Type:** Armorican (small)
- **References:** Colquhoun 1977/78, 95, no. 85.
- **Wells:** Wells Museum (1450)

967. Worle Hall, Somerset (centred on Worle: ST335625)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **LE:** 11.7cm
- **WI (blade):** 6.4cm
- **WI (socket, inner-outer):** 3-3.9cm
- **LE (socket, back-front, inner-outer):** 2.8-3.5cm
- **WE:** 374g
- **Description:** Cast copper alloy socketed looped axe with a rather faint decoration of four ribs terminating in circlets on each face. It has a thick upper and thinner lower mouth moulding, a splayed loop and a much splayed cutting edge. The sides are almost straight.
- **References:** Colquhoun 1977/78, 95, no. 81.
- **Oxford:** Ashmolean Museum (1927.2656)
- **Plate 64**

968. "Somerset"

- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:** Pearce 1983, 545, no. 830.
- **Wells:** Wells Museum (1450)

Staffordshire

Hoards: none

Single finds:

969. Brades Rd., Warley, Staffordshire (SO982902)

- **Copper alloy socketed axe**
- **Type:** Transitional (plain)
- **Description:** Plain cast copper alloy socketed looped axe with simple single mouth moulding and a sub-rectangular socket. The sides diverge slightly; the cutting edge is splayed.
- **Note:** Watson suggests that "the fact that the socket is larger from front to back than from side to side places this axe quite firmly amongst those of Sompting type….the 'massiveness' of the piece, the bevelled rim and the slightly spurred loop all support this classification. Although axes of Sompting type often have quite complex decoration, plain ones, such as the example here described, are by no means uncommon." (Watson 1983/84, 4). However, the axe described is not very similar to Kingston or Tower Hill axes and should be regarded as a forerunner rather than true Sompting axe.
- **References:** Watson 1983/84, 4, fig. 5.
- **Private Possession**

970. Water Eaton, Staffordshire (SJ906114)

- **Copper alloy socketed axe**
- **Type:** Transitional
- **Description:** Plain cast copper alloy socketed looped axe with square single mouth moulding and straight sides which diverge in the lower part and form a widely splayed cutting edge.
- **References:** Watson 1983/84, 4, fig. 4.
- **Birmingham:** Birmingham City Museum (A 112-1983)

Suffolk

Hoards:

971. +972. West Row, Mildenhall, Suffolk (centred on Mildenhall: TL677750)

- **Axe hoard**
- **Type:** Sompting, Cardiff II variant
- **Description:** Two large socketed axes which, unfortunately, have received unprofessional treatment for bronze disease in the past. Both of them are heavy and can be classified as axes of Sompting type, Cardiff II variant with almost parallel sides and a splayed cutting edge. The faces on one axe are decorated with three long

ribs ending in simple circlets and on the other axe, five long ribs terminating in small pellets.

- **Note:** The find spot 'Mildenhall' is probable, but can no longer be verified. The two axes come from the Sidford Collection, housed in Moyse's Hall, Bury St Edmunds. Lord Sidford collected objects particularly from the Mildenhall area of Suffolk, but there are a few objects from further afield in his collection.
- **References:** Pendleton 1999, 120, fig. 41, nos. 130+131.
- **Location:** Bury St Edmunds: Moyse's Hall (MM SF. B5+6, Sidford Coll.)
- **971. Copper alloy socketed axe (rib-and-pellet decorated) (1)**
  - **Type:** Sompting, Cardiff II variant
  - **LE (remaining):** 11,9cm
  - **WI (blade, remaining):** 6,2cm
  - **LE (socket, inner-outer):** 2,9-4.6cm
  - **WI (socket, inner-outer):** 2,55-3,95cm
  - **Description:** Cast copper alloy socketed looped axe with badly corroded surface due to unprofessional treatment of bronze disease in the past. No pictures were taken prior to conservation. The axe has a sub-rectangular socket with a double mouth moulding though the lower mouth moulding is not very pronounced. Both faces bear different decoration: one face shows five ribs terminating in double pellets and the other five ribs terminating in just one pellet.
- **972. Copper alloy socketed axe (rib-and-circle decorated) (2)**
  - **Type:** Sompting, Cardiff II variant
  - **LE:** 12,3cm,
  - **WI (blade, remaining):** 5,6cm
  - **LE (socket, inner-outer):** 3,2-4,5cm
  - **WI (socket, inner-outer):** 3-4,2cm.
  - **Description:** Cast copper alloy socketed looped axe with badly corroded surface due to bad treatment of bronze disease (see above). Although similar in shape to axe no. 971, the decoration is different. However, as on axe no. 971, the two faces bear two different patterns of decoration. One face shows three ribs terminating in circlets, the other three ribs, one terminating in a pellet and the other two in circlets.
- **Note: S**imilar to the hoard from Quy Fen, Cambridgeshire
- **Plates 64 and 65**

Single finds:

973. Cavenham, Suffolk (centred on village: TL765695)

- **Copper alloy socketed axe**
- **Type:** Transitional

- **Description:** Cast copper alloy socketed looped axe of the faceted type. It displays additional facets between faces and sides and therefore, an octagonal cross-section; the edges of the facets are embellished with ribs.
- **References:** Unpublished
- **Cambridge:** University of Cambridge Museum of Anthropology and Archaeology (97.86)
- **Plate 66**

974. Clare, Suffolk (centred on village: TL765455)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **LE:** 11,9cm
- **WI (blade):** 3,1cm
- **LE (socket, outer-inner):** 3,9-3,0cm
- **WI (socket, outer-inner):** 3,0-2,3cm
- **Description:** Cast copper alloy socketed looped axe in as-cast condition.
- **References:** Unpublished
- **Ipswich:** Suffolk County Museum (1955.60)
- **Plate 66**

975. Eriswell, Suffolk (centred on tumuli near south of Eriswell: TL731772)

- **Copper alloy socketed axe**
- **Type:** Transitional
- **LE:** 12,0cm
- **WI (cutting edge):** 5,3cm
- **WI (socket, inner-outer):** 3,4-4,3 cm
- **LE (socket, back-front, inner-outer):** 3,0-4,15cm
- **WE:** 436,14g
- **Description:** Cast copper alloy socketed looped axe with dark red (almost black) patina on one face and patchy dark red/gold/light brown/green patina on the other. The axe has a double mouth moulding. The rim of the upper moulding is flat rather than bulgy and the mouth is aligned with the blade that is rectangular. The implement is decorated with three ribs (ca. 4,8cm in length) on each face. The ribs are suspended from a thin rib-like lower mouth moulding. The loop is thick and semi-circular, but not spurred. The casting seams have been flattened (probably with a hammer) – except the seams around the loop which are still intact. There are no visible re-sharpening marks, but the cutting edge appears sharp and its outermost area is of a bright golden colour which possibly indicates that it was re-sharpened in more recent times. There are some more dents further to the top of the axe – across the rim on two sides. Comparing the damage with the outline of the body of another socketed axe suggests that it was probably inflicted by using an axe or palstave (a strong tool

with a curved blade) and repeatedly hitting the rim. The purpose of this damage is unknown and difficult to explain.
- **Note:** Label attached to axe: “Found in a Roman Mound at Eriswell in Suffolk, 1837”, and a small piece of paper inside that reads: “Looped socketed celt, found in a mound at Eriswell, Suffolk, 1837. Given by the Trustees of the Christy Coll’n 1866.”
- **British Museum Register:** “Roman mound, Eriswell, Suff. 1837”
- **References:** Pendleton 1999, 120, fig. 40, no. 129.
- **London:** British Museum (1866, 6-27, 55) (Sites and Monuments Record: Suffolk ERL?)
- **Plate 67**

976. Farnham, near Bury St Edmunds, Suffolk (centred on village: TM365605)
- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 12.8cm
- **WI (blade):** 5.7cm
- **WI (socket, inner-outer):** 2.9-4.1cm
- **LE (socket, back-front, inner-outer):** 3.4-4.5cm
- **WE:** 455g
- **Description:** Cast copper alloy socketed looped axe with straight sides and a double mouth moulding. The faces are decorated with five ribs (6.2cm in length) terminating in pellets. The two outer ribs coincide with the edges of the faces. There is a small hole (casting flaw) under the loop.
- **References:** Evans 1881, 122, fig. 133.
- **Oxford:** Ashmolean Museum (1927.2657)
- **Plate 67**

977. Lackford, Suffolk (centred on village: TL785705)
- **Copper alloy socketed axe**
- **Type:** Transitional
- **LE:** 9,9cm
- **WI (blade):** 4,95cm
- **LE (socket, outer-inner):** 4,1-3,0cm
- **WI (socket, outer-inner):** 3,9-3,1cm.
- **Description:** Cast copper alloy socketed looped axe with sub-rectangular socket, large upper mouth moulding and a smaller moulding underneath. There are four ribs on each face which partly overlay this lower mouth moulding. Only outer ribs terminate in pellets, but there is a decorative pellet between the two inner ribs, just where they end. On one side it is more visible than on the other. There are also very slight hammer/punch marks on the lower part of the socket.
- **Note:** It might possibly come from the same mould (or was made from the same mould template) as the identical axe from the Erwarton (Suffolk) hoard. This hoard is a metal-detector find

from pre-Treasure Act Amendment of 2002 and thus now in private possession. It was recorded in the Sites and Monuments Record for Suffolk as ARW024.

- **References:**
  - Smedley *et al.* 1961, 292
  - Museum Catalogue Moyse's Hall, 1968, pl. III, no. 4.
  - Martin *et al.* 1993, 79.
- **Bury St Edmunds:** Moyse's Hall (Lackford 1977-754 (08))
- **Plate 68**

978. Lakenheath, Suffolk (centred on town: TL715825)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **LE (remaining):** 12,5cm
- **WI (cutting edge):** 6,1cm
- **WI (socket, inner-outer):** 3,15-4,15cm
- **LE (socket, back-front, inner-outer):** 3,25-4,2cm
- **WE:** 410,1g
- **Description:** Cast copper alloy socketed looped axe with bright golden patina and elaborate decoration on both faces. There is clear evidence for wear: re-sharpening marks are clearly visible and the blade is still sharp. The casting seams have been trimmed and the sides are very smooth to the touch. The axe has a double mouth moulding with a thicker upper and thinner lower mouth moulding. Both faces bear the same decoration which has been flatted – whether by accident or on purpose cannot be determined. Each face is decorated with five ribs (5,7cm in length). The two outer ribs and the central one terminate in a circle (6mm in diameter) which encircles a pellet. Also, these ribs are decorated with 14-16 small pellets (1,5-2mm in diameter) resembling pearls on a string. It seems very likely that all six ribs were meant to have 16 pellets, but some of them have been worn off/rubbed off/filed off in the attempt to make the "pearls" look more pronounced. This, however, could have also occurred in more recent times. Evidence that this "re-working" of the axe happened after it was recovered in the late 19th century or early 20th century is provided by three small holes which have been drilled into the area between upper and lower mouth moulding. There is one hole above and to the left of the loop and another two just above the two faces. These three holes (ca 2,1mm in diameter) look like they have been made with an industrial drill.
- **Note:** It seems likely that the holes and the reworking of the axes coincided, i.e. the axe was prepared for suspension in a display cabinet.
- **British Museum Register:** "Copper alloy socketed celt with loop, each face ornamented with beaded stripes terminating in circles, alternating with three plain stripes terminating in knobs,

4 3/3 inch / Purchased by W.F. Newton Esq., Lakenheath, Suffolk / Found near Lakenheath, Suffolk."

- **References:**
  - Evans 1881, 125, fig. 139.
  - Pendleton 1999, 120, fig. 41, no. 125.
- **London:** British Museum (1860, 4-2, 1)
- **Plate 68**

979. Mildenhall, Suffolk (centred on town: TL715755)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant?
- **Description:** Long slender cast copper alloy looped socketed axe with a single shallow sub-rectangular mouth moulding and almost parallel sides. The cutting edge is not much splayed. The faces are decorated with three long ribs terminating in small, almost unrecognisable pellets.
- **References:** Pendleton 1999, 120, fig. 41, no. 126.
- **Private Possession** (SMR: Suffolk MNL119)

980. Mildenhall, Suffolk (centred on town: TL715755)

- **Copper alloy socketed axe**
- **Type:** Linear-decorated
- **Description:** Cast copper alloy socketed looped axe with three outwards curving ribs one either side of the face and a central rib ending in a flat pellet.
- **Note:**
  - There is no picture of the find and we only have Evans' reference for it. Evans presents it as being similar to the axe from Cambridge, no. 86 (Evans 1881, 145)
  - This could be the axe from Mildenhall, mentioned below, no. 983 (Pendleton 1999, 120, fig. 40, no. 120).
- **References:**
  - Evans 1881, 127.
  - O'Connor 1980, 585, List 227, no. 27
- **Mr H. Prigg's Collection**

981. Mildenhall, Suffolk (centred on town: TL715755)

- **Copper alloy socketed axe**
- **Type:** Linear-decorated
- **Description:** Cast copper alloy socketed looped axe of linear-decorated type. The edges of the facets are embellished with ribs and there is a central rib on each face. The central rib and the ribs on the edges of the faces terminate in a small round pellet.
- **Note:** This axe could not be located in the museum, but there is a picture of it in the Museum Catalogue.
- **References:**
  - Museum Catalogue 1968, pl. III, no. 14.
  - O'Connor 1980, 584, List 227, no. 26.

- **Lost(?)**, should be in Moyse's Hall, Bury St Edmunds

982. Mildenhall, Suffolk (centred on town: TL715755)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **Description:** Large cast copper alloy socketed looped axe with square double mouth moulding, diverging sides and a splayed cutting edge. The loop is splayed and the faces are decorated with three long ribs terminating in pellets.
- **References:** Pendleton 1999, 120, fig. 38, no. 134.
- **Private Possession** (SMR: Suffolk MNL 228)

983. Mildenhall, Suffolk (centred on town: TL715755)

- **Copper alloy socketed axe**
- **Type:** Linear-decorated?
- **LE:** 10.7cm
- **WI (blade):** 5.1cm
- **WI (socket, inner-outer):** 2.9-3.8cm
- **LE (socket, back-front, inner-outer):** 2.6-3.3cm
- **WE:** 190g.
- **Description:** Cast copper alloy socketed looped axe with a round socket moulding and wide collar moulding. The edges and sides of the faces are decorated with 2-3 ribs, all ending in one pellet. There is another pellet (without rib) in the centre of the axe, on both sides.
- **Note:** The axe appears to be a very crude copy of the much more skilfully cast linear-decorated axes from East Anglia (e.g. nos. 842-843 from Cringleford, Norfolk, Plate 42)
- **References:** Pendleton 1999, 120, fig. 40, no. 120.
- **Oxford:** Ashmolean Museum (1927.2658) (Suffolk Sites and Monuments Record: Suffolk MNL Misc.)
- **Plate 68**

984. Mildenhall, Suffolk (centred on town: TL715755)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant (?)
- **Description:** Cast copper alloy socketed looped axe with square single mouth moulding, an only very slightly diverging sides and a somewhat splayed cutting edge. The faces are decorated with three thin widely-spaced ribs terminating in tiny pellets. The lower parts of the ribs are connected by a zigzag border, the lower angles of which are also decorated with a small pellet.
- **References:** Pendleton 1999, 120, fig. 40, no. 127.
- **Private Possession** (Suffolk Sites and Monuments Record: Suffolk MNL080)

985. Mildenhall (?), Suffolk (centred on town: TL715755)

- **Copper alloy socketed axe**

- **Type:** Sompting, Tower Hill (?)
- **Description:** Cast copper alloy socketed looped axe with long and slender but nevertheless heavy body, diverging sides and a widely splayed cutting edge. The upper part is very narrow and the faces are decorated with three plain ribs.
- **References:** Pendleton 1999, 120, fig. 40, no. 128.
- **Private Possession** (Suffolk Sites and Monuments Record: Suffolk MNL?)

986. Outney Common, Suffolk (centred on the Common: TM328905)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant (?)
- **Description:** Cast copper alloy socketed looped axe with square (?) large single mouth moulding and a smaller, ribbed moulding underneath. The sides are diverging and the cutting edge is splayed. The decoration is not very easily visible on the picture in Cane's publication, but it seems to constitute of two or three circlets with central pellet just below the ribbed mouth moulding. A rib descends from each circle and the central rib is longer than the other two. It terminates in a circlet with central pellet. The ends of the ribs are possibly connected via diagonal ribs (?).
- **Note:** The axe was found "… on the site of an ancient fort over the Waveney, on the mud left on the river side by a dredger." (Cane 1939, 81)
- **References:** Cane 1939, 79-82.
- **Location:** Unknown.

987. Thetford, Suffolk (centred on town: TL875835)

- **Copper alloy axe**
- **Type:** Uncertain: Transitional or Sompting, Tower Hill/Kingston variant(?)
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration (?)
- **Note:** Evans only mentions the axe in passing; there is no image of it in his 1881 publication. He describes it as "…I have another of the same kind [i.e. the axe from Caston, Norfolk, see above], but longer, and without the diagonal lines, from Thetford, Suffolk." The axe from Caston (Norfolk) has been recorded here as no. 902.
- **References:** Evans 1881, 122.
- **Location:** Uncertain

Surrey

Hoards:

988. -991. Kingston, Surrey (centred on the Thames at Kingston-upon-Thames: TQ179703)

- **Axe hoard**
- **Type:** Sompting, Kingston variant (3) and Tower Hill variant (1)
- **Description:** Small hoard consisting of four cast copper alloy socketed looped axes.
- **Note:**
  - Evans describes and shows one axe from 'Kingston, Surrey' which is possibly one of the axes from the hoard (Evans 1881, 126, fig. 137). He says that the most elaborately decorated axe was found with three others although he does not connect this axe with the axe shown in fig. 137 (Evans 1881, 142, fig. 137).
  - The British Museum Register and Huth mention that the axes had been found with a golden ring, but apparently, this has been lost and neither pictures nor description of it exists (Huth 1997, 274).
- **988. Copper alloy socketed axe (1)**
  - **Type:** Sompting, Tower Hill variant
  - **LE:** 11,4cm
  - **WI (cutting edge):** 6,1cm
  - **WI (socket, inner-outer):** 2,5-3,4cm
  - **LE (socket, back-front, inner-outer):** 3,0-4,1cm
  - **WE:** 360,6g
  - **Description:** Plain cast copper alloy socketed looped axe with dark green-turquoise patina and a few white-ochre flecks. The axe is fairly heavy and it does look neither used nor sharpened, although the cutting edge looks like it was hammered and shaped. It has a single large sub-rectangular mouth moulding. The cutting edge is slightly splayed.
  - **London:** British Museum (49, 3-26, 4)
- **989. Copper alloy socketed axe (2)**
  - **Type:** Sompting, Kingston variant
  - **LE:** 11,6cm
  - **WI (cutting edge):** 6,5cm
  - **WI (socket, inner-outer):** 3,0-3,95cm
  - **LE (socket, back-front, inner-outer):** 3,1-4,2cm
  - **WE:** 381,3g
  - **Description:** Decorated cast copper alloy socketed looped axe with dark green-turquoise patina and light orange-white flecks. The axe has a very thick sub-rectangular upper mouth moulding and another, smaller one underneath. The axe is very heavy and striations and nicks along the cutting edge suggest

that it was re-sharpened and used (?). The cutting edge is splayed and so is the loop. Its loop is flat, but the opening circular. The axe is decorated with three more or less evenly spaced ribs on one side (just over 5cm in length) and four unevenly spaced ribs on the other side (just over 5cm in length).
    - **London:** British Museum (49, 3-26, 3)
- **990. Copper alloy socketed axe (3)**
    - **Type:** Sompting, Kingston variant
    - **LE:** 12,6cm
    - **WI (cutting edge):** 5,8cm
    - **WI (socket, inner-outer):** 2,7-3,5cm
    - **LE (socket, back-front, inner-outer):** 3-3,9cm
    - **WE:** 405,8g
    - **Description:** Decorated cast copper alloy socketed looped axe, slightly damaged, with bright golden patina on the one and dark green-turquoise patina on the other face. The axe has a sub-rectangular thicker upper mouth moulding and another, smaller mouth moulding underneath. The mouth is undamaged except for a small area on the outside of the upper mouth, where an oval abrasion is clearly visible. The axe shows clear marks of re-sharpening and wear: one corner of the cutting edge is slightly bent and damaged, which might result from either usage or accident. The loop at its side is flat and the hole practically circular. The axe is decorated with rib-and-circlet decoration. On one face it displays three ribs (4,6cm in length) terminating is circlets with a central pellet, the latter not being connected to either the ribs or the circlets. On the other side the axe shows the same decoration, except for an additional rib that runs parallel to the central rib, starting from the lower mouth moulding and running down to the circlet as well.
    - **London:** British Museum (49, 3-26, 1)
- **991. Copper alloy socketed axe (4)**
    - **Type:** Sompting, Kingston variant
    - **LE:** 12,3cm
    - **WI (cutting edge):** 5,5cm
    - **WI (socket, inner-outer):** 2,95-3,9cm
    - **LE (socket, back-front, inner-outer):** 3,75-4,9cm
    - **WE:** 505,6g
    - **Description:** Decorated cast copper alloy socketed looped axe with sub-rectangular double mouth moulding. Its patina is dark green with bright green and white flecks. The loop is comparatively large and slightly splayed. The axe is wedge-shaped with a somewhat splayed cutting edge which has been sharpened and perhaps used. It is elaborately

decorated – with a different pattern on each side. One face displays a decoration of three pellets encircled with (?) one or two circlets each, just below the lower mouth moulding. From the central circlet three ribs extend downwards (4,1cm in length) touching the outer circlet of another pellet encircled with two circles in the middle of the axe's face. From the two outer circles two ribs each run downwards terminating in another pellet encircled by two circlets. The three upper pellet-and-circlets are much worn and it is not certain whether the pattern was complete or carried out accurately. On the other face there is only one pellet encircled with two circles just below the lower mouth moulding. It is bridged by a curved rib which narrows below the circlets and then widens again in a sharp angle (almost like an Ω-shape) – the two arms diverging downwards diagonally terminating, presumably, in another pellet-encircled-by-two-circlets. These circlets are much worn and almost obliterated. There may be another central pellet-in-circlet(s) without a vertical rib connecting it to the mouth.
        - **London:** British Museum (49, 3-26, 2)
    - **References:**
        - Evans 1881, 124, fig. 137 and 126, fig. 142.
        - British Museum Bronze Age Guide 1920, fig. 55.
        - Thomas 1989, 281
        - Huth 1997, 274.
    - **London:** British Museum (1849, 3-26, 1-4)
    - **Note:** The plain axe carries an old label inside the socket: "Looped socketed celts, from the Thames at Kingston, Surrey. Purchased 1849."
    - **British Museum Register:** 4 Celts, purchased of W. Brown, "… 4 objects were found at Kingston upon Thames, with a gold ring, of a later, but uncertain age."
    - **Plates 69 and 70**

Single finds:

992. Kingston-on-Thames, Surrey (centred on the Thames at Kingston-upon-Thames: TQ179703)

- **Copper alloy socketed axe**
- **Type:** Sompting, Figheldean Down variant
- **LE:** 13,9cm
- **WI (cutting edge):** 5,2cm
- **WI (socket, inner-outer):** 3,3-4,1cm
- **LE (socket, back-front, inner-outer):** 3,1-4,1cm
- **WE:** 463,565g
- **Description:** Cast copper alloy socketed looped axe with smooth dark green-black patina with some small white and

beige flecks in the upper part. The axe has one thick upper mouth moulding which is not aligned with the blade, and another rib-like lower mouth moulding. The axe is very heavy and wedge-shaped with almost parallel sides in the upper part and converging sides in the lower part. It is decorated with three ribs on each face (ca. 5cm in length). The casting seams have been trimmed, but the axe shows almost no other indication of wear: Its blade is blunt although there appear to be some vertical and horizontal striations (i.e. re-sharpening marks).

- **Label:** "Kingston on Thames. Mus. P. Geol"
- **British Museum Register:** "Copper alloy celt with socket and loop, quadrangular section, three ribs on each side, L: 5½ inch, Transferred from the Museum of Practical Geology, Stated to have been found at Kingston on Thames."
- **References:** Unpublished.
- **London:** British Museum (1863, 1-22, 118)
- **Plate 71**

993. River Thames at Thames Ditton, near Kingston-on-Thames, Surrey (centred on River Thames at Thames Ditton: TQ159677)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **LE:** 12,1cm
- **WI (cutting edge):** 6,6cm
- **WI (socket, inner-outer):** 3,1-4,1cm
- **LE (socket, back-front, inner-outer):** 3,1-3,95cm
- **WE:** 429,505g
- **Description:** Plain cast copper alloy socketed looped axe of dark golden colour and scratchy but smooth patina. The axe has a square double mouth moulding with a thick upper and a flatter, thinner lower mouth moulding. The axe is plain, except for a bump just below the lower mouth moulding on one side which may have been caused by a flaw in the mould. The axe is heavy, the sides only slightly parallel and the cutting edge is splayed and somewhat broad. The blade is fairly sharp still and shows signs of wear.
- **British Museum Register:** "Copper alloy socket celt with loop, quadrangular in section, L: 4¾ in. Presented by A.W. Franks, Esq., found in the Thames in dredging at Thames Ditton near Kingston, April 1877."
- **References:** Unpublished.
- **London:** BritishMuseum (1877, 5-12, 2)
- **Plate 71**

994. River Thames near Kingston, Surrey (centred on the Thames at Kingston-upon-Thames: TQ179703)

- **Copper alloy socketed axe**

- **Type:** Sompting, Kingston variant(?)
- **Description:** Cast copper alloy socketed looped axe with elaborate rib-and-pellet decoration that is very similar to the unprovenanced find from the Thames (see below, no. 1344), expect for it having thin double ribs instead of single ones. Also there are two rectangular shapes between the horizontal ribs instead of just one.
- **Note:** Evans only states that the celt was found in the Thames near Kingston. It is assumed here that this means in the county of Surrey (Evans 1881, 125).
- **References:** Evans 1881, 125, fig. 141.
- **London:** Museum of the Society of Antiquaries.

995. River Thames (?) Richmond, New Lock (centred on Richmond Lock: TQ1775)

- **Copper alloy socketed axe**
- **Type:** Transitional
- **LE:** 10,0cm
- **WI (cutting edge):** 5,5cm
- **WI (socket, inner-outer):** 2,8-3,4cm
- **LE (socket, back-front, inner-outer):** 2,6-3,32cm
- **WE:** 169,87g
- **Description:** Cast copper alloy socketed looped axe of the facetted type. Its patina is dull golden on one face and dark greyish-black on the other. The axe is covered with white-beige patches of crusty(?) residue. The socket is almost circular and has a broad collar between the two mouth mouldings. There is still a piece of wood from the shaft inside the axe. The axe has eight unevenly spaced facets: a broad one in the centre of each face and a broad “facet” on each side. The four remaining facets between the faces and sides are narrower and the axe is reminiscent of the late facetted axes in East Anglian hoards. Its cross-section is octagonal. The edges of the faces are enhanced with ribs, some of which are not very distinct. The loop is thin and not very even. The casting seams were trimmed down and the lower part of the axe, above the cutting edge, shows re-sharpening marks. Overall, the cutting edge is very sharp. It is wide and curved (crescent-shaped), but not much splayed.
- **Note:** The label inside the axe reads: “1749, Richmond, New Lock, July 1898 (?)”
- **British Museum Register:** “Copper alloy socketed celt, polygonal body, round mouth, loop, L: 4”, Richmond, new Lock, 1863”.
- **References:** Unpublished.
- **London:** British Museum (WG 1749)
- **Plate 71**

996. Bed of the River Wey, Surrey

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant (probably)
- **Description:** Large cast copper alloy socketed looped axe, with single mouth moulding and diverging sides. The blade is somewhat splayed and the faces are decorated with two ribs terminating in small pellets surrounded by circlets.
- **References:**
  - Gardner 1912, 130, pl. II, no. 3.
  - Phillips 1967, 32, fig. 5.4.
- **Kingston:** Kingston Museum (?)

997. Surbiton, Surrey (centred on town: TQ175675)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **Description:** Roots description is as follows: "…the celt has a double mouth moulding and a possibly square socket, almost parallel sides and a slightly splayed cutting edge. It is decorated with two smaller rectangles placed next to each other on the upper part of the face, sharing one side, and two ribs terminating in small circlets below the rectangles. The ribs descend from the middle of the lower (shorter) side of each rectangle" (Roots 1853, 101)
- **Note:**
  - Phillips writes: "Socketed axes decorated with ribs and pellets; square mouth… *British Museum Bronze Index* says: 'rather brassy looking, possibly not genuine." (Phillips 1967, 29)
  - This socketed axe might be the elaborate specimen Roots (who lived in Surbiton, Kingston-upon-Thames) presented to the Society of Antiquities in 1853 (ref. see below). He writes that there was "…exhibited by the hands of Sir Henry Ellis, a beautiful specimen of a moulded ring celt, taken from the bed of the Thames on the 13th of July, by the ballast-heavers employed in deepening the river in that neighbourhood."
- **References:**
  - Phillips 1967, 29.
  - Roots 1853, 101.
- **London:** Society of Antiquaries, Roots Collection

998. The Ford, Weybridge, Surrey (TQ069648)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **Note:** Phillips classifies this axe as a 'Taunton-Hademarschen' socketed axe, but her image suggests that it is an Armorican axe.
- **References:** Phillips 1967, 33, fig. 5.6

- **Weybridge:** Weybridge Museum (148-1964)

Sussex

Hoards:

999.-1008. Ferring, Sussex (centred on Ferring Rife: TQ090019)

- **Axe dominated hoard**
- **Type:** Transitional (1), Linear-facetted (3), Sompting type, Cardiff II variant (3), unknown (3)
- **Description:** The hoard contains two Gündlingen Type sword fragments, a socketed leather-working knife, part of a cast copper alloy belt or strap attachment(?) and 10 axes (including one fragment).
- **Note:** The hoard was/is not available for research. It cannot be taken off display. Images in catalogue are courtesy of Worthing Museum.
- **999. Copper alloy socketed axe (1)**
  - **Type:** Sompting, Cardiff II variant
  - **Note:** A metal ring is attached to the loop of the axe
  - **Plate 73**
- **1000. Copper alloy socketed axe (2)**
  - **Type:** Sompting, Cardiff II variant
  - **Plate 73**
- **1001. Copper alloy socketed axe (3)**
  - **Type:** Sompting, Cardiff II variant
  - **Plate 73**
- **1002. Copper alloy socketed axe (4)**
  - **Type:** Transitional
- **1003. Copper alloy socketed axe (5)**
  - **Type:** Linear-facetted
  - **Plate 73**
- **1004. Copper alloy socketed axe (6)**
  - **Type:** Linear-facetted
- **1005. Copper alloy socketed axe (7)**
  - **Type:** Linear-facetted
- **1006. Copper alloy socketed axe (8)**
  - **Type:** unknown, decorated with skeuemorphic wing decoration.
  - **Plate 74**
- **1007. Copper alloy socketed axe (9)**
  - **Type:** unknown
  - **Plate 74**
- **1008. Copper alloy socketed axe (10)**
  - **Type:** unknown
  - **Plate 74**

- **Note:** The hoard comes from the eastern shore of the Ferring Rife.
- **References:**
  - Aldsworth 1985, 4.
  - Huth 1997, 275
- **Worthing:** Worthing Museum and Art Gallery (1983/109)
- **Plates 72-74**

1009.-1025. Near Hill Barn, Sompting, Sussex (TQ178061)

- **Axe dominated hoard**
- **Type:** Linear-decorated/East Rudham type (2); Sompting, Figheldean Down variant (5); Sompting, Cardiff II (1); Sompting, Kingston variant (5); Transitional/uncertain (4)
- **Description:** One fragmentary cauldron, fragments of at least one other cauldron, part of a phalera and 17 socketed axes: 2 linear-decorated axes, 4 socketed axes with rib-and-pellet decoration, 1 socketed axe with three vertical ribs, 2 plain socketed axes, 1 socketed axe with three divergent ribs ending in ring-and-pellet motifs, 1 axe with five vertical ribs ending in pellets, 1 axe with five vertical ribs.
- **Notes:** The hoard was not available for research. Measurements were converted from inches (measured by Curwen) into centimetres (Curwen 1948). Axe blade widths were estimated from photographs published by Curwen (Curwen 1948). Establishing the individual axe types was difficult because weight, decoration and surface finish are important factors and cannot be determined from the images sent by Worthing Museum.
- **Socketed axes:**
  - **Types:** Linear-decorated or East Rudham (nos. 1009-1010); Sompting, Figheldean Down variant (nos. 1011-1014, 1025); Sompting, Kingston variant (nos. 1015+1018); Sompting, Tower Hill variants (nos. 1016-1017+1022); Sompting, Cardiff II variant (no. 1019), probably transitional axes (?) (nos. 1020-1021; 1023-1024).
  - **Note:** Axes 1-4 (Figheldean Down) and 5-6 (linear-decorated/East Rudham (?)) were cast in the same mould.
- **1009. Copper alloy socketed axe (1)** (Curwen's no. 5)
  - **Type:** Linear-decorated or East Rudham
  - **LE:** 10.79cm
  - **WI (blade):** 4.75cm
- **1010. Copper alloy socketed axe (2)** (Curwen's no. 6)
  - **Type:** Linear-decorated or East Rudham
  - **LE:** 10.79cm
  - **WI (blade):** 4.67cm
- **1011. Copper alloy socketed axe (3) four rib-and-pellets** (Curwen's no. 1)

    - **Type:** Sompting, Figheldean Down variant
    - **LE:** 13.462cm
    - **Wl (blade):** 6.52cm
- **1012. Copper alloy socketed axe (4) four rib-and-pellets** (Curwen's no. 2)
    - **Type:** Sompting, Figheldean Down variant
    - **LE:** 13.462cm
    - **Wl (blade):** 5.44cm
- **1013. Copper alloy socketed axe (5) four rib-and-pellets** (Curwen's no. 3)
    - **Type:** Sompting, Figheldean Down variant
    - **LE:** 13.462cm
    - **Wl (blade):** 5.62cm
- **1014. Copper alloy socketed axe (6) four rib-and-pellets** (Curwen's no. 4)
    - **Type:** Sompting, Figheldean Down variant
    - **LE:** 13.462cm
    - **Wl (blade):** 5.44cm
- **1015. Copper alloy socketed axe (7) three vertical ribs** (Curwen's no. 8)
    - **Type:** Sompting, Kingston variant
    - **LE:** 10.79cm
    - **Wl (blade):** 6.96cm
- **1016. Copper alloy socketed axe (8) plain** (Curwen's no. 11)
    - **Type:** Sompting, Tower Hill variant
    - **LE:** 12.7cm
    - **Wl (blade):** 7.84cm
- **1017. Copper alloy socketed axe (9) plain** (Curwen's no. 12)
    - **Type:** Sompting, Tower Hill variant
    - **LE:** 12.446cm
    - **Wl (blade):** 6.69cm
- **1018. Copper alloy socketed axe (10) elaborate decoration** (Curwen's no. 13)
    - **Type:** Sompting, Kingston variant
    - **LE:** 12.446cm
    - **Wl (blade):** 6.223cm
- **1019. Copper alloy socketed axe (11) five ribs-and-pellets** (Curwen's no. 15)
    - **Type:** Sompting, Cardiff II variant
    - **LE:** 13.081cm
    - **Wl (blade):** 6.54cm
- **1020. Copper alloy socketed axe (12) five ribs** (Curwen's no. 16)
    - **Type:** Transitional/possibly Sompting, Tower Hill variant
    - **LE:** 12,446cm
    - **Wl (blade):** 6.95cm
- **1021. Copper alloy socketed axe (13) undecorated** (Curwen's no. 17)
    - **Type:** Transitional/possibly Sompting, Tower Hill variant

    - **LE:** 11.43cm
    - **WI (blade):** 6.89cm
- **1022. Copper alloy socketed axe (14) undecorated** (Curwen's no. 14)
    - **Type:** Possibly Sompting, Tower Hill or Kingston variant
    - **LE:** 11.811cm
    - **WI (blade):** 6.77cm
- **1023. Copper alloy socketed axe (15) undecorated** (Curwen's no. 10)
    - **Type:** Transitional
    - **LE:** 11.176cm
    - **WI (blade):** 5.41cm
- **1024. Copper alloy socketed axe (16) faint ribs; collar** (Curwen's no. 9)
    - **Type:** Transitional
    - **LE:** 10.16cm
    - **WI (blade):** 6.17cm
- **1025. Copper alloy socketed axe (17) undecorated** (Curwen's no. 7)
    - **Type:** Sompting, Figheldean Down (?)
    - **LE:** 13.335cm
    - **WI (blade):** 5.56cm
- **Cauldron:**
    - **Type:** Class B2, Type Raffrey Bog, Variant Sompting
    - **Description:** Remains of cauldron with oblate globular body; much damaged; probably four tiers of sheets; "…everted ribbed rim; cast handle attachments with integral studs; fabricated extensions to handle attachments; ring handles; strappings on exterior between rim and body; ancient repairs." (Gerloff 2010, 218)
    - **References:** Gerloff 2010, 218-20.
- **Note:**
    - There was, possibly, a corroded iron fragment (part of the hoard?) or some other iron source in the soil that left traces of iron corrosion on one of the axes (Huth 1997, 275).
- **References:**
    - Curwen 1948, 157-159.
    - Curwen 1954, 64, 203-204
    - O'Connor 1980, 423, no. 223 and 585, List 227, no. 28.
    - Thomas 1989, 282.
    - Huth 1997, 275.
    - Gerloff 2010, 218-20, no. 59.
- **Worthing:** Worthing Museum and Art Gallery
- **Plates 75-77**

Single finds:

1026. Alfriston, Sussex (centred on village: TQ515035)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **LE:** 13.5cm
- **WI (blade):** 4.9cm
- **WI (socket, inner-outer):** 3.1-4.3cm
- **LE (socket, back-front, inner-outer):** 3.2-4.3cm
- **WE:** 391g
- **Description:** Very heavy cast copper alloy socketed looped axe of Armorican type with typically blunt cutting edge, double mouth moulding and splayed but not quite closed (casting flaw) loop.
- **References:** Grinsell 1931, 61, F1.
- **Oxford:** Ashmolean Museum (1927.2661)
- **Plate 78**

1027. Brighton, Sussex (centred on the church of St Nicholas: TQ3081904474)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **Note:** Dixon argues that this axe is "similar to some in the British Museum, discovered at Jersey…" (Dixon 1849, 268). The axe was found near the church of St Nicholas.
- **References:**
  - Dixon 1849, 268, no. 12.
  - Grinsell 1931, 61, F2.
- **Location:** Unknown

1028. Hollingbury Hill, Sussex (centred on hillfort: TQ320079)

- **Copper alloy socketed axe**
- **Type:** Armorican (Tréhou variant)
- **Note:** Hollingbury Hill is an Iron Age hillfort.
- **References:**
  - Dixon 1849, 268, no. 7.
  - Grinsell 1931, 61, F3.
  - Thomas 1983, 198-199.
- **Oxford:** Ashmolean Museum (1927.2660)

Warwickshire:

Hoards: none

Single finds: none

Wiltshire:

Hoards:

1029. -1050. Rifle Field Firing Range, Tilshead, Figheldean Down, Wiltshire (SU192493)

- **Axe hoard**
- **Type:** Sompting, Figheldean Down variant
- **Description:** The hoard consists of 21 axes and a very small fragment of a sickle blade or a razor (?). There were, possibly, more objects (amongst them, more socketed axes), but they are lost or were smelted down after discovery, according to Coombs (Coombs 1979, 253).
- **Note:** Nos. 1030-1032 and nos. 1033-1036, 1043+1045+1048 are mould matches. Axes nos. 1037 and 1038 are of different size, but they, too, seem to have come from the same mould. Axes nos. 1033-1036, 1043+1045+1048 were made in the same mould that was also used to make the large socketed axe from the Salisbury/Netherhampton hoard (Wiltshire, no. 1096) and the single find from near Stockbridge (Hampshire, no. 1394).

1029. Copper alloy socketed axe fragment (jammed into socket of axe no. 1030, see description below)

1030. Copper alloy socketed axe (1)

- **Type:** Sompting, Figheldean Down
- **LE:** 13,9cm
- **WI (cutting edge):** 5,6cm
- **WI (socket, inner-outer):** 2,9-4cm
- **LE (socket, back-front, inner-outer):** 3,1-4,3cm
- **WE:** 513g
- **Description:** Cast copper alloy socketed looped axe in as-cast condition. The cutting edge was neither used nor sharpened and the casting seams are still intact. The axe does not show any damage except at the thick single mouth moulding, which bears many “air-holes” of varying sizes. The axe seems very heavy, but the weight of the socketed axe fragment inside it, of course, adding to its own weight. It has a thick sub-rectangular single mouth moulding. The axe possesses a very rough surface with large turquoise and white flecks and only some golden copper alloy shining through. The axe is decorated with three ribs on each face, but looking at the two faces, the ribs are neither symmetrical nor evenly spaced: on one face they are slightly wavy and just under 7cm long and on the other face, the ribs are much more broadly spaced and just under 6cm long. The exact length of the ribs on both sides is difficult to determine as there is no clear end to them. The two halves of the axe seem mismatched, because the half with the longer ribs is slightly narrower than the other. This is clearly visible

where the halves meet – at the casting seams. Jammed tightly inside the socket is a medium-sized piece of another socketed axe (no.1029): It is about a quarter of a mouth of the socketed axe, with its small double-mouth moulding just visible and the loop not being squashed, but naturally flat, it seems.

- **Plates 78 and 79**
- **London:** British Museum (P.1971, 7-2, 1)

1031. Copper alloy socketed axe (2)

- **Type:** Sompting, Figheldean Down
- **LE:** 13,8cm
- **WI (cutting edge):** 5,55cm
- **WI (socket, inner-outer):** 2,9-4,15cm
- **LE (socket, back-front, inner-outer):** 3,3-4,4cm
- **WE:** 467,2g
- **Description:** Cast copper alloy socketed looped axe in as-cast condition with casting seams still in place and a blunt un-sharpened and un-worked cutting edge. The surface is rough, especially on one side. Its patina is muddy brown-reddish with large patches of light and darker turquoise and white flecks. One part of the thick single mouth moulding is smooth and of a shiny dark silvery-colour. The mouth is clearly sub-rectangular and its upper edges have not been trimmed. This axe, as mentioned above, was definitely made in the same mould as axe no 1: the spacing and length of the ribs are similarly uneven and the two halves of the axe similarly mismatched. This axe has many dents and nicks, most of them smaller or bigger casting flaws, but one “flaw” could come from a small sharp-bladed instrument (there is a small rectangular hole just below the mouth moulding and above to the right of the loop – see drawing – which seems artificial rather than accidental). Just as axe no 1030’s surface, most of the casting flaws on no 1031’s surface seem to be characteristic of this axe, probably as a result from using a different copper alloy during casting or casting the metal at a slightly different temperature. There is only one flaw that obviously comes from the flawed mould that they share: the left one of the three shorter ribs forks half-way into “two terminals” – one of them being a little thicker, the other one a little thinner. It is possible that a thinner rib was carved into the (stone? clay?) mould first, but then found wanting and finally replaced by a thicker substitute which was also “more parallel” to the central rib. This “forking” rib can be found – more or less pronounced – on all three axes – nos. 1030-1032.
- **London:** British Museum (P.1971, 7-2, 2)
- **Plate 79**

1032. Copper alloy axe (3)

- **Type:** Sompting, Figheldean Down
- **LE:** 14,1cm
- **WI (cutting edge):** 5,5cm

- **WI (socket, inner-outer):** 2,9-4,1cm
- **LE (socket, back-front, inner-outer):** 3,4-4,35cm
- **WE:** 458g
- **Description:** Cast copper alloy socketed looped axe with uneven patches of muddy white patina mixed with large patches and very organic-looking dendrites of dark turquoise colour. The surface is smoother than the surface of axes nos. 1030 and 1031. The decoration is the same, but the distinctive casting flaw (see above, under no. 1031) is not as pronounced as on axe nos. 1030 and 1031. The surface of the axe shows not as many holes and dents as the surface of axe no 1031, but it is more "cracked" and resembles dry soil in some spots. In the lower half of the axe's body a split/tear is clearly visible on one of the axe's sides. It is likely that this tear was not caused in the casting process, but afterwards using force. It is not clear why it was attempted to tear this axe in half; it appears to be in much better condition than axes nos. 1030-1031. Axe no. 1032 bears fewer nicks and dents than the others and the thick mouth moulding does not show similar porosity.
- **London:** British Museum (P.1971, 7-2, 3)
- **Plate 79**

1033. Copper alloy socketed axe (4)

- **Type:** Sompting, Figheldean Down
- **LE:** 13,5cm
- **WI (cutting edge):** 5,5cm
- **WI (socket, inner-outer):** 3,1-4,2cm
- **LE (socket, back-front, inner-outer):** 3,2-4,14cm
- **WE:** 456,5g
- **Description:** Cast copper alloy socketed looped axe with three more or less evenly spaced ribs (ca 5,5cm in length) on each face. The axe used to be of a shiny golden colour – this can still be seen on the protruding parts of the axe, like the ribs and parts of the mouth moulding. The remaining body of the axe has a dark turquoise patina on the one face and a dark brown-golden patina on the other face. However, the surface is very patchy in general – with large white patches and dark bluish–black and white flecks. The axe possesses an almost square double mouth moulding – a thick upper and a smaller mouth moulding underneath. The edges of the faces are enhanced in the upper part so that it almost seems that there are another couple of ribs on each face. The axe appears to be perfectly well made, but neither the casting seams nor the seams on top of the mouth moulding and in the inside of the loop were trimmed. There are two rather larger casting flaws (?) between the two mouth mouldings on the two faces: the gap between the two mouth mouldings is not clearly visible, but filled with an overflow of copper alloy, on one face actually producing a small bulk between upper and lower mouth. The same "flaws"

are more or less clearly visible on the following three axes, nos. 1034-1036.
- **London:** British Museum P.1971, 7-2, 4
- **Plate 80**

1034. Copper alloy socketed axe (5)
- **Type:** Sompting, Figheldean Down
- **LE:** 13,9cm
- **WI (cutting edge):** 5,7cm
- **WI (socket, inner-outer):** 3,15-4,1cm
- **LE (socket, back-front, inner-outer):** 3,2-4,1cm
- **WE:** 473,9g
- **Description:** Cast copper alloy socketed looped axe with rough surface and white-beige patina that covers almost the entire surface. Darker patches of turquoise and dark red patina are shining through. The axe is in as-cast condition with the casting seams still more or less intact and a very pronounced untrimmed casting seam visible on the top of the upper mouth moulding. The axe is neither damaged nor does it have any holes or dents from the casting process, but the upper mouth moulding is, though bigger than the one underneath, not completely “filled” with copper alloy and rather thin and hollow in contrast to the upper mouth moulding of the other axes of this type (nos. 1033, 1035-1036). The side with this “deprived” mouth moulding is the one opposite the one with the loop. The general outline and ribbed decoration are the same as in axe no. 1033 and will not be repeated here. It is worth noting, however, that the two casting flaws between upper and lower mouth moulding can be found on this axe as well. However, one of the “copper alloy bulks” is less pronounced compared to the same one on axe no. 1033.
- **London:** British Museum (P.1971, 7-2, 5)
- **Plates 80 and 82**

1035. Copper alloy socketed axe (6)
- **Type:** Sompting, Figheldean Down
- **LE:** 13,6cm
- **WI (cutting edge):** 5,7cm
- **WI (socket, inner-outer):** 3,0-4,1cm
- **LE (socket, back-front, inner-outer):** 3,0-4,15cm
- **WE:** 481,4g
- **Description:** Cast copper alloy socketed looped axe, very probably from the same mould as nos. 1033 and 1034 and the large copper alloy axe from the Netherhampton hoard (no. 1096). This axe has a less rough, golden shimmering surface with larger patches of green-turquoise and white-beige patina. The axe is in as-cast condition and has neither been used nor sharpened. However, there are some minor notches in the cutting edge which probably means that at some point it was attempted to use it as a hammer (?). There are also some scratches on one of the faces, on the lower part of the body –

these scratches seem quite recent while the notches in the cutting edge do not appear recent. The axe possesses a more or less square double mouth moulding with a thicker upper mouth moulding and a thinner mouth moulding underneath. The overall pattern and decoration is the same as on the other axes from this mould (nos. 1033-1036). The casting flaws (?) are in the same place – between the upper and lower mouth moulding.
- **London:** British Museum (P.1971,7-2, 6)
- **Plates 80 and 82**

1036. Copper alloy socketed axe (7)
- **Type:** Sompting, Figheldean Down
- **LE:** 13,3cm
- **WI (cutting edge):** 5,8cm
- **WI (socket, inner-outer, remaining):** 2,9-3,7cm
- **LE (socket, back-front, inner-outer, remaining):** 2,7-3,95cm
- **WE:** 437,2g
- **Description:** Cast copper alloy socketed looped axe with half of the mouth mouldings missing because of a casting flaw – there probably was not enough copper alloy to fill the mould completely and not only one half of the double mouth moulding – on one face – is almost complete and the remaining ¾ of the mouth mouldings are either incomplete or missing. The small "plank" casting flaw (see above, no. 1035) between upper and lower mouth moulding, however, is clearly visible. The decoration and overall lay out is identical to that of axes nos. 1033-1035. The patina is a dull green on one face and a bright green/turquoise/white/beige colour on the other face. The surface is slightly rough but there are no further flaws – notches and dents – apart from the missing ¾ of the mouth mouldings. The casting seams are still intact, but there are very thin and narrow so that the surfaces of the axes sides almost appear trimmed and smoothed. The cutting edge is blunt.
- **London:** British Museum (P.1971, 7-2, 7)
- **Plate 80**

1037. Copper alloy socketed axe (8)
- **Type:** Sompting, Figheldean Down
- **LE:** 13,9cm
- **WI (cutting edge):** 5,5cm
- **WI (socket, inner-outer):** 3,2-4,2cm
- **LE (socket, back-front, inner-outer):** 3,1-4,3cm
- **WE:** 484,4g
- **Description:** Cast copper alloy socketed looped axe, very similar to the lot nos. 1033-1036, but not from the same mould. This axe seems to have shared a mould with no. 1038 instead. It is in as-cast condition. The axe is of bright golden colour with large patches of dark green/turquoise-white/beige patina. The casting seams are still intact and the cutting edge displays

neither working nor re-sharpening marks. The double mouth moulding with one thicker upper and a thinner lower mouth moulding is of square shape and without a casting rim. The loop is much broader and more thickset than the loops of the two "mould groups" discussed above, which strongly suggests that it came from a different mould. It also does not have the casting flaws characteristic for second group (nos. 1033-1036) or the forking rib characteristic for the first (nos. 1030-1032). However, it also has three simple ribs on each face, ca. 4,5cm in length, and on the other face, 5,3cm long. There are additional "ribs" on the edges of the faces. There is a somewhat unusual casting flaw (?) in the left lower corner of the axe's body, just above the corner of the cutting edge: it is a rectangular dent. Other casting flaws in the surface are either oblong or round holes or dents that probably originate from air bubbles closed up in the liquid copper alloy.

- **London:** British Museum (P.1971, 7-2, 8)
- **Plate 81**

1038. Copper alloy socketed axe (9)

- **Type:** Sompting, Figheldean Down
- **LE:** 12,5cm
- **WI (cutting edge):** 5,4cm
- **WI (socket, inner-outer):** 3,1-4,4cm
- **LE (socket, back-front, inner-outer):** 3,0-4,1cm
- **WE:** 430,7g
- **Description:** Cast copper alloy socketed looped axe coming from the same mould as no. 1037, but looking much more worn. The axe used to be of bright golden colour, just like its counterpart no. 1037, but now most of it is covered with a dirty dark green/turquoise patina with dirty white/beige patches. It has an almost square-shaped double-mouth moulding and a casting flaw (hole) between two ribs in the upper part of the axe's body. There is another, slightly smaller dent, on the other face, interrupting the lower mouth moulding. The most interesting feature about this axe is that it has been used. The axe is shorter than the other axes mainly because the cutting edge has been rounded and sharpened – and the axe seems both used and re-sharpened again. Re-sharpening marks are also visible on the surfaces where they have smoothed down the lower endings of some of the ribs and left thin scratch marks in the surface. However, the cutting edge is not sharp anymore, but interrupted by nicks and dents which may come from using the axe as a hammer or another blunt tool.
- **London:** British Museum (P.1971, 7-2, 9)
- **Plate 81**

1039. Copper alloy socketed axe (10)

- **Type:** Sompting, Figheldean Down
- **LE:** 13,7cm
- **WI (cutting edge):** 5,4cm

- **WI (socket, inner-outer, remaining):** 3,45-4,35cm
- **LE (socket, back-front, inner-outer, remaining):** 3,3-4,0cm
- **WE:** 421,4g
- **Description:** Cast copper alloy socketed looped axe of dull golden colour and with a dark-muddy green patina on the one face and light turquoise/beige patina on the other face. The axe is complete, but damaged: about one third of the mouth moulding is missing and there is a thumb-sized hole in one of the faces, just below the box-decoration. Also, the loop is missing. The axe is in as-cast condition with an un-sharpened and unused cutting edge. The casting seams are not very pronounced, but not smoothed down either. The axe possesses a square/sub-rectangular double mouth moulding with a thicker upper and a thinner, rib-like mouth moulding underneath. This is the only axe of the lot that bears more elaborate decoration: on each face it bears three ribs ending in round pellets. The two outer ribs (6cm) are longer than the central one (4cm), because the latter is not attached to the lower mouth moulding, but a horizontal line of 2cm which connects the two outer ribs to form a “box-shaped” pattern with the lower mouth moulding. Inside, the opposite corners of the “box” are connected with thin ribs to form a broad “X”. All three ribs end on the same level in a very circular shaped pellet – the six pellets are roughly of the same size: 4cm (diameter).
- **London:** British Museum (P.1971, 7-2, 10)
- **Plates 81 and 83**

1040. Copper alloy socketed axe (11)

- **Type:** Sompting, Figheldean Down
- **LE:** 13,6cm
- **WI (cutting edge):** 5,75cm
- **WI (socket, inner-outer):** 3,2-3,85cm
- **LE (socket, inner-outer, back-front):** 3,55-4,35cm
- **WE:** 497,6g
- **Description:** Cast copper alloy socketed looped axe of dark dull copper alloy colour with large patches of bright turquoise/dark green and white-beige patina. The axe is complete and it seems like the casting seams have been smoothed down, though not very efficiently, and the cutting edge shows re-sharpening marks and still quite sharp. The axe has a clear sub-rectangular double mouth moulding with the classical thick upper and thinner lower mouth moulding underneath. The decoration comprises of only two unevenly spaced ribs on each face. The loop of the axe is complete, but was not made evenly from the two halves of the mould: one half of the mould made up almost the complete loop, while the other mould half only added ¼ of the loop (compare drawing). There is a fragment of a socketed axe jammed inside the socket, but it does not seem to belong to axe no. 1039 which is the only severely damaged axes in this lot. The fragment

inside axe no. 1040 has two ribs on its outer side (hardly visible), but this pattern has not striking similarity with other transitional axes. According to the way the fragment is curved, it can be assumed that the complete axe was a lot smaller and probably much lighter than this axe.

- **London:** British Museum (P.1971, 7-2, 11)
- **Plates 78, 81 and 83**
- **Small copper alloy fragment (separate)**
  - **LE:** 2,9cm
  - **WI:** 2,2cm
  - **Thickness:** ca. 0,5-1,5cm
  - **WE:** 7,7g
  - **Description:** Small fragment of cast copper alloy, more or less rectangular with dark muddy reddish/brown patina freckled with turquoise. The fragment is decorated with two parallel moulded ribs along one of the longer sides and at first glance the fragment looks like a thick – maybe as-cast – fragment of a Late Bronze Age razor. However, the ribs are only on one face and Late Bronze Age razors usually have ribs on both faces
  - **London:** British Museum (P.1971, 7-2, 12)

1041. Copper alloy socketed axe (12)

- **Type:** Sompting, Figheldean Down
- **LE:** 14,4cm
- **WI (cutting edge):** 5,5cm
- **WI (socket, inner-outer):** 3,3-4,2cm
- **LE (socket, back-front, inner-outer):** 3,2-4,3cm
- **WE:** ca. 480g
- **Description:** Cast copper alloy socketed looped axe with square socket and one thick mouth moulding. The axe is wedge-shaped with slightly diverging sides. The axe has a dark golden patina and is decorated with three ribs of ca. 7,4cm length on each face. It has probably been used and there are re-sharpening marks parallel to the blade.
- **Salisbury:** Salisbury Museum (246/1971 – 1)
- **Plates 84 and 85**

1042. Copper alloy socketed axe (13)

- **Type:** Sompting, Figheldean Down
- **LE:** 13,6cm
- **WI (cutting edge):** 5,5cm
- **WI (socket, inner-outer):** 3,3-3,9cm
- **LE (socket, back-front, inner-outer):** 3,7-4,3cm
- **WE:** ca. 450g
- **Description:** Cast copper alloy socketed looped axe with sub-rectangular socket and double mouth moulding. The axe has a thicker upper and thinner lower mouth moulding underneath. It is wedge-shaped and the casting seams are intact along the sides and along the cutting edge. It is in as-cast condition. The

axe is of dark silver/greenish colour and probably has a fairly high tin content. Both faces are decorated with three rather uneven but thin and neatly cast ribs.
- **Salisbury:** Salisbury Museum (246/1971 – 2)
- **Plates 84 and 85**

1043. Copper alloy socketed axe (14)
- **Type:** Sompting, Figheldean Down
- **LE:** 13,4cm
- **WI (cutting edge):** 5,6cm
- **WI (socket, inner-outer):** 3,3-4,15cm
- **LE (socket, back-front, inner-outer):** 3,2-4,3cm
- **WE:** ca. 467g
- **Description:** Cast copper alloy socketed looped axe with square mouth and double mouth moulding with thick upper and slightly thinner lower mouth moulding. The surface is porous, cracked and it is of dark golden colour. It has fairly thin casting seams, but the axe generally is in as-cast condition.
- **Salisbury:** Salisbury Museum (246/1971 – 3)
- **Plates 82, 84 and 85**

1044. Copper alloy socketed axe (15)
- **Type:** Sompting, Figheldean Down
- **LE:** 13,9g
- **WI (cutting edge):** 5,2cm
- **WI (socket, inner-outer):** 3,2-4,3cm
- **LE (socket, back-front, inner-outer):** 3,5-4,4cm
- **WE:** ca. 463g
- **Description:** Cast copper alloy socketed looped axe with sub-rectangular socket and double mouth moulding. It has a thick upper and slightly thinner lower mouth moulding (almost a horizontal rib). The axe retains its casting seams along the sides and the cutting edge and it has not been used or re-sharpened. It is decorated with three evenly-spaced short ribs (3,9cm in length) terminating in a small pellet. A thick flat round pellet is set below each pellet (diameter of small pellets, ca. 0,5cm – diameter of thick flat pellet, ca. 1cm). The loop starts at the lower mouth moulding and has also has widely splayed lower edges.
- **Salisbury:** Salisbury Museum (246/1971 – 4)
- **Plates 84 and 85**

1045. Copper alloy socketed axe (16)
- **Type:** Sompting, Figheldean Down
- **LE:** 13,8cm
- **WI (cutting edge):** 5,7cm
- **WI (socket, inner-outer):** 3,4-4,2cm
- **LE (socket, back-front, inner-outer):** 3,3-4,2cm
- **WE:** ca. 470g
- **Description:** Cast copper alloy socketed looped axe with square socket and double mouth moulding. It is a thicker upper and thinner lower mouth moulding with the casting seam still

intact above the upper mouth moulding and along the sides and the cutting edge. The axe has never been used or re-sharpened and it is of dark golden/greenish colour and is wedge-shaped with slightly converging sides.
- **Salisbury:** Salisbury Museum (246/1971 – 5)
- **Plates 84 and 85**

1046. Copper alloy socketed axe (17)
- **Type:** Sompting, Figheldean Down
- **LE:** 13,4cm
- **WI (cutting edge):** 6,1cm
- **WI (socket, inner-outer):** 4,1-4,9cm
- **LE (socket, back-front, inner-outer):** 3,6-4,9cm
- **WE:** ca. 466g
- **Description:** Cast copper alloy socketed looped axe with square socket and double mouth moulding. The upper mouth moulding is very thick and miscast in places. The lower mouth moulding is wide, too (compared with the widths of the other axes lower mouth mouldings). The axe is wedge-shaped, but instead of being long and slender is has wide faces and seems a little more thick-set. It is decorated with five unevenly spaced ribs on each face (ca. 5,2cm in length), the outer ribs being set along the edges of the face. The casting seams along the sides were broken off, and there are few re-sharpening marks and also few nicks from usage.
- **Note:** Some of the wear indicates that it may have been used in more recent times.
- **Salisbury:** Salisbury Museum (246/1971 – 6)
- **Plates 85 and 87**

1047. Copper alloy socketed axe (18)
- **Type:** Sompting, Figheldean Down
- **LE:** 13,6cm
- **WI (cutting edge):** damaged
- **WI (socket, inner-outer):** 3,0-4,05cm
- **LE (socket, back-front, inner-outer):** 3,5-4,2cm
- **WE:** ca. 405g
- **Description:** Cast copper alloy socketed looped axe with dark golden/muddy green patina and double-mouth moulding of square- to sub-rectangular shape. The axe is decorated with three evenly-spaced thin ribs (5,5cm in length) terminating in pellets on each face. The casting seams have been trimmed at the sides and the axe has been used – there are signs of usage and re-sharpening marks. However, the two corners of the cutting edge have been broken off; this looks like intentional damage, possibly from impact.
- **Note:** This axe appears to be a more carefully made specimen than the other axes which are much cruder.
- **Salisbury:** Salisbury Museum (246/1971 – 7)
- **Plates 85 and 87**

1048. Copper alloy socketed axe (19)

- **Type:** Sompting, Figheldean Down
- **LE:** 13,5cm
- **WI (cutting edge):** ca. 5,5cm
- **WI (socket, inner-outer):** 3,4-4,1cm
- **LE (socket, back-front, inner-outer):** 3,4-4,3cm
- **WE:** 480g (slightly more)
- **Description:** Cast copper alloy socketed looped axe with very shiny bright golden/silver patina, almost square socket and a double mouth moulding. The casting is faulty (with a hole in the upper mouth moulding and a miscast lower mouth moulding). The surface is bubbly and holy and the casting seams along the sides are still intact. Nevertheless, the axe has been used and re-sharpened.
- **Salisbury:** Salisbury Museum (246/1971 – 8)
- **Plates 85 and 87**

1049. Copper alloy socketed axe (20)

- **Type:** Sompting, Figheldean Down
- **LE:** 13,05cm
- **WI (cutting edge):** 4,8cm
- **WI (socket, inner-outer):** 3,15-4,0cm
- **LE (socket, back-front, inner-outer):** 3,4-4,5cm
- **WE:** ca. 365g
- **Description:** Cast copper alloy socketed looped axe with shiny golden/silver patina, sub-rectangular socket and double-mouth moulding. The upper mouth moulding is very thick while the lower mouth moulding is hardly visible underneath. The axe is wedge-shaped, but seems a little shorter than the other axes (probably because the cutting edge is fairly narrow). It is decorated with three long and very fine ribs (7,1cm in length) terminating in pellets. The casting seams along the sides and the cutting edge have not been trimmed and the axe is in as-cast condition.
- **Salisbury:** Salisbury Museum (246/1971 – 9)
- **Plates 85 and 87**

1050. Copper alloy socketed axe (21)

- **Type:** Sompting, Figheldean Down
- **LE:** 12,9cm
- **WI (cutting edge):** 6,2cm
- **WI (socket, inner-outer):** 3,25-4,2cm
- **LE (socket, back-front, inner-outer):** 3,1-4,1cm
- **WE:** ca. 412g
- **Description:** Cast copper alloy socketed looped axe with dark greenish patina, rectangular socket and double mouth moulding. The axe is undecorated and its shape is very different from that of the other axes: it has a rectangular socket. The cutting edge itself has been hammered into shape and while the sides clearly converge, it curves slightly back upwards (rather like a fish tail than a door wedge). The sides and top of the axe are smooth and there are re-sharpening

marks and definite signs of wear along the cutting edge. This axe is the only one of the lot which has appears to have been used over a long period of time indicated by the worn blade and recurring evidence of repeated resharpening.

- **Salisbury:** Salisbury Museum (246/1971 – 10)
- **References:**
  - Salisbury and South Wiltshire Museum, Annual Report, 1971-72, 16, Plate 1A.
  - Wiltshire Archaeological Register for 1971, 1972, 171.
  - Coombs 1979, 253-268
  - Thomas 1989, 281
  - Huth 1997, 275
- **London:** British Museum (12 axes: P.1971, 7-2, 1-12), and **Salisbury:** Wiltshire Museum (9 axes: 246/1971-1-10).
- **Plates 85 and 87**

Add: 1354.-1387. Hindon, Wiltshire (ST 91196 31889)

- **Axe dominated hoard**
- **Type:** Hindon (33); Sompting, Cardiff II variant (1)
- **Description:** An Early Iron Age hoard discovered in late 2011 by a metal detectorist and excavated by the local FLO and the assistant County Archaeologist on January 18th, 2012. The hoard contains 82 copper alloy and iron objects: 34 cast copper alloy socketed looped axes, 39 copper alloy rings, 2 copper alloy bracelets/bangles, 3 iron spearheads, 1 iron sickle and several (2 joining) fragments of copper alloy sheet metal.
- **1354. Copper alloy socketed axe (No. 49)**
  - **Type:** Sompting, Cardiff II variant (probably)
  - **Length:** 12.8cm
  - **WI (cutting edge):** 5.9cm
  - **WI (socket, inner-outer):** 2.5-4cm
  - **WI (socket, inner-outer, back-front):** 2.8-4.1cm
  - **WE:** 461g
  - **Description:** Cast copper alloy socketed looped axe of Sompting type. Complete. Side looped. Bulbous, sub-rectangular, double mouth moulding. Blade shows definite signs of wear and re-sharpening. Both faces are decorated with seven ribs ending in pellets, two of which are on outer edges of the faces. Most of the casting seams have been removed, some are still in place.
  - **Plate 136**
- **1355. Copper alloy socketed axe (No. 74)**
  - **Type:** Hindon (variant)
  - **Length:** 9.72cm
  - **WI (cutting edge):** 5cm
  - **WI (socket, inner-outer):** 2.3-2.8cm
  - **WI (socket, inner-outer, back-front):** 2.2-3cm

- **WE:** 157g
- **Description:** Cast copper alloy socketed looped axe. Hindon type (variant). Related to Portland, East Rudham and Blandford types. Complete. Side-looped, high tin alloy, double mouth moulding, straight triangular blade, casting flashes prominent on sides, blade and mouth. Decorated on both faces with two central ribs which are diverging towards the end, terminating in pellets within small circlets. Axes of this type are characteristically cast with a high-tin content and have a very shiny silvery surface, probably due to an enrichment in eutectoid during casting by the so called tin-sweat phenomenon. The two parts of the cast axe have split and broken apart along the blade.

- **1356. Copper alloy socketed axe (No. 72)**
  - **Type:** Sompting, Cardiff II variant (probably)
  - **Length:** 9.9cm
  - **WI (cutting edge):** 5.9cm
  - **WI (socket, inner-outer):** 2.3-3.7cm
  - **WI (socket, inner-outer, back-front):** 2.5-3.6cm
  - **WE:** 378g
  - **Description:** Cast copper alloy socketed looped axe of Sompting type. Complete. Side looped. Bulbous, sub-rectangular, double mouth moulding. Blade shows definite signs of wear and re-sharpening. Decorated with three ribs.
- **1357. Copper alloy socketed axe (No. 63)**
  - **Type:** Sompting, Tower Hill variant
  - **Length:** 11.4cm
  - **WI (cutting edge):** 7.1cm
  - **WI (socket, inner-outer):** 2.8-3.7cm
  - **WI (socket, inner-outer, back-front):** 2.8-4.2cm
  - **WE:** 424g
  - **Description:** Plain cast copper alloy socketed looped axe of Sompting type. Complete. Bulbous, sub-rectangular mouth, double mouth moulding. Blade shows definite signs of wear and re-sharpening. The crescentic blade has almost “curled up” corners. Much of the casting seams have been removed, some remain on sides of axe. The axe is undecorated.
- **1358. Copper alloy socketed axe (No. 43)**
  - **Type:** Hindon
  - **Length:** 9.54cm
  - **WI (cutting edge):** 5.26cm
  - **WI (socket, inner-outer):** 2.2-2.6cm
  - **WI (socket, inner-outer, back-front):** 2.2-2.9cm
  - **WE:** 109g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth

moulding, straight triangular blade, casting flashes somewhat prominent on sides, blade and mouth, but trimmed in places. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated. One side is missing the lower half of the body and the clay core is showing through. The core is of reddish/orange colour.

- **1359. Copper alloy socketed axe (No. 52)**
  - **Type:** Hindon
  - **Length:** 10.3cm
  - **WI (cutting edge):** 5.7cm
  - **WI (socket, inner-outer):** 1.6-2.6cm
  - **WI (socket, inner-outer, back-front):** 2.1-2.6cm
  - **WE:** 119g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes prominent on sides, blade and especially mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated. Some iron residue seems to be left on one of the faces.
- **1360. Copper alloy socketed axe (No. 51)**
  - **Type:** Hindon
  - **Length:** 9.2cm
  - **WI (cutting edge):** 4.4cm
  - **WI (socket, inner-outer):** 2.2-2.9cm
  - **WI (socket, inner-outer, back-front):** 2.2-2.7cm
  - **WE:** 120g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes prominent on sides, blade and especially mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated. Some iron residue seems to be left on one of the faces.
- **1361. Copper alloy socketed axe (No. 56)**
  - **Type:** Hindon
  - **Length:** 9.1cm
  - **WI (cutting edge):** 4.3cm
  - **WI (socket, inner-outer):** 1.9-2.2cm
  - **WI (socket, inner-outer, back-front):** 2.2-2.7cm
  - **WE:** 110g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Slightly miscast mouth. Probably iron residue on surface. Undecorated.

- **1362. Copper alloy socketed axe (No. 1)**
  - **Type:** Hindon
  - **Length:** 9.4cm
  - **WI (cutting edge):** 4.2cm
  - **WI (socket, inner-outer):** 2-2.7cm
  - **WI (socket, inner-outer, back-front):** 2-2.6cm
  - **WE:** 125g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated. Some iron residue seems to be left on one of the faces.
- **1363. Copper alloy socketed axe (No. 54)**
  - **Type:** Hindon
  - **Length:** 9.5cm
  - **WI (cutting edge):** 4.45cm
  - **WI (socket, inner-outer):** 2-2.6cm
  - **WI (socket, inner-outer, back-front):** 2-2.7cm
  - **WE:** 139g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes prominent on sides, blade and mouth. It has a sub-rectangular mouth moulding and a very small side loop. Tip of blade broken. The outermost edge is fractured and slightly bent and cracked. Core still intact. Small hole (casting flaw) in side opposite side with loop. Undecorated.
- **1364. Copper alloy socketed axe (No. 59)**
  - **Type:** Hindon
  - **Length:** 9.2cm
  - **WI (cutting edge):** 4.3cm
  - **WI (socket, inner-outer):** 2-2.6cm
  - **WI (socket, inner-outer, back-front):** 2.2-2.6cm
  - **WE:** 125g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
- **1365. Copper alloy socketed axe (No. 42)**
  - **Type:** Hindon
  - **Length:** 9.5cm
  - **WI (cutting edge):** 4.3cm
  - **WI (socket, inner-outer):** 1.9-2.8cm
  - **WI (socket, inner-outer, back-front):** 1.8-2.6cm

- **WE:** 108g
- **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes prominent on sides, blade and mouth, but seem to have been flattened in lower part of axe. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.

- **1366. Copper alloy socketed axe (No. 62)**
  - **Type:** Hindon
  - **Length:** 9.3cm
  - **WI (cutting edge):** 4.2cm
  - **WI (socket, inner-outer):** 2.2-2.7cm
  - **WI (socket, inner-outer, back-front):** 2-2.6cm
  - **WE:** 123g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated. Clay core still intact.
- **1367. Copper alloy socketed axe (No. 55)**
  - **Type:** Hindon
  - **Length:** 9.5cm
  - **WI (cutting edge):** 4.1cm
  - **WI (socket, inner-outer):** 2.1-2.7cm
  - **WI (socket, inner-outer, back-front):** 2.4-2.9cm
  - **WE:** 140g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated. One corner of blade and lower part of axe splintered and cracked, missing. Clay core showing through. Casting seams still intact and especially pronounced around the loop – more pronounced than on any of the other axes.
- **1368. Copper alloy socketed axe (No. 44)**
  - **Type:** Hindon
  - **Length:** 9.1cm
  - **WI (cutting edge):** 4.2cm
  - **WI (socket, inner-outer):** 1.9-2.6cm
  - **WI (socket, inner-outer, back-front):** 2-2.6cm
  - **WE:** 117g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes

very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated. Greenish patina, silver sheen in patches. Fractured along blade and along lower part of sides along casting seams.

- **1369. Copper alloy socketed axe (No. 48)**
  - **Type:** Hindon
  - **Length:** 9.1cm
  - **WI (cutting edge):** 4.2cm
  - **WI (socket, inner-outer):** 2.1-2.6cm
  - **WI (socket, inner-outer, back-front):** 1.9-2.7cm
  - **WE:** 135g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
- **1370. Copper alloy socketed axe (No. 61)**
  - **Type:** Hindon
  - **Length:** 9.3cm
  - **WI (cutting edge):** 4.3cm
  - **WI (socket, inner-outer):** 2.1-2.6cm
  - **WI (socket, inner-outer, back-front):** 2.3-2.7cm
  - **WE:** 122g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
- **1371. Copper alloy socketed axe (No. 77)**
  - **Type:** Hindon
  - **Length:** 9.2cm
  - **WI (cutting edge):** 4.2cm
  - **WI (socket, inner-outer):** 1.9-2.5cm
  - **WI (socket, inner-outer, back-front):** 2.1-2.5cm
  - **WE:** 114g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated. Casting flaw in mouth moulding, opposite side with loop.
- **1372. Copper alloy socketed axe (No. 73)**
  - **Type:** Hindon
  - **Length:** 9.5cm
  - **WI (cutting edge):** 4.8cm

        - **WI (socket, inner-outer):** 2.1-2.6cm
        - **WI (socket, inner-outer, back-front):** 2.2-2.7cm
        - **WE:** 144g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
    - **1373. Copper alloy socketed axe (No. 71)**
        - **Type:** Hindon
        - **Length:** 9.5cm
        - **WI (cutting edge):** 4.6cm
        - **WI (socket, inner-outer):** 2.1-2.8cm
        - **WI (socket, inner-outer, back-front):** 2.3-2.8cm
        - **WE:** 153g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. Seems slightly bigger and heavier that previous axes. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated. Clay core still intact.
    - **1374. Copper alloy socketed axe (No. 67)**
        - **Type:** Hindon
        - **Length:** 9.3cm
        - **WI (cutting edge):** 4.6cm
        - **WI (socket, inner-outer):** 2.1-2.8cm
        - **WI (socket, inner-outer, back-front):** 2.3-2.8cm
        - **WE:** 153g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
    - **1375. Copper alloy socketed axe (No. 79)**
        - **Type:** Hindon
        - **Length:** 9.3cm
        - **WI (cutting edge):** 4.3cm
        - **WI (socket, inner-outer):** 2.1-2.6cm
        - **WI (socket, inner-outer, back-front):** 2.1-2.6cm
        - **WE:** 130g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a

square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.

- **1376. Copper alloy socketed axe (No. 66)**
  - **Type:** Hindon
  - **Length:** 9.4cm
  - **WI (cutting edge):** 4.2cm
  - **WI (socket, inner-outer):** 2-2.6cm
  - **WI (socket, inner-outer, back-front):** 2.1-2.6cm
  - **WE:** 121g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very extremely on sides and very prominent along blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
- **1377. Copper alloy socketed axe (No. 70)**
  - **Type:** Hindon
  - **Length:** 9.5cm
  - **WI (cutting edge):** 4.6cm
  - **WI (socket, inner-outer):** 2.2-2.7cm
  - **WI (socket, inner-outer, back-front):** 2.3-2.8cm
  - **WE:** 148g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes extremely prominent on sides and very prominent on blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
- **1378. Copper alloy socketed axe (No. 53)**
  - **Type:** Hindon
  - **Length:** 9.4cm
  - **WI (cutting edge):** 4.7cm
  - **WI (socket, inner-outer): /**
  - **WI (socket, inner-outer, back-front):** 2.2-2.8cm
  - **WE:** 128g
  - **Description:** Cast copper alloy socketed looped axe. Incomplete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. ½ of the mouth and mouth moulding are missing opposite the side with the loop. Undecorated. Heavily encrusted with green patination.
- **1379. Copper alloy socketed axe (No. 57)**
  - **Type:** Hindon
  - **Length:** 9.3cm
  - **WI (cutting edge):** 4.3cm

        - **WI (socket, inner-outer):** 2-2.6cm
        - **WI (socket, inner-outer, back-front):** 1.9-2.5cm
        - **WE:** 124g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes extremely prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
    - **1380. Copper alloy socketed axe (No. 60)**
        - **Type:** Hindon
        - **Length:** 9.4cm
        - **WI (cutting edge):** 4.3cm
        - **WI (socket, inner-outer):** 2.1-2.7cm
        - **WI (socket, inner-outer, back-front):** 2.2-2.6cm
        - **WE:** 113g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Slightly miscast mouth moulding. Undecorated.
    - **1381. Copper alloy socketed axe (No. 78)**
        - **Type:** Hindon
        - **Length:** 9.5cm
        - **WI (cutting edge):** 4.8cm
        - **WI (socket, inner-outer):** 2.2-2.8cm
        - **WI (socket, inner-outer, back-front):** 2-2.8cm
        - **WE:** 142g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Slightly miscast cutting edge. Undecorated.
    - **1382. Copper alloy socketed axe (No. 68)**
        - **Type:** Hindon
        - **Length:** 9.4cm
        - **WI (cutting edge):** 4.4cm
        - **WI (socket, inner-outer):** 2.1-2.6cm
        - **WI (socket, inner-outer, back-front):** 2.3-2.7cm
        - **WE:** 114g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes extremely prominent on sides, blade and mouth. It has

a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.

- **1383. Copper alloy socketed axe (No. 65)**
  - **Type:** Hindon
  - **Length:** 9.4cm
  - **WI (cutting edge):** 4.6cm
  - **WI (socket, inner-outer):** 2.1-2.9cm
  - **WI (socket, inner-outer, back-front):** 2-2.7cm
  - **WE:** 143g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes extremely prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Small casting flaw (hole) beneath loop. Undecorated.
- **1384. Copper alloy socketed axe (No. 58)**
  - **Type:** Hindon
  - **Length:** 9.4cm
  - **WI (cutting edge):** 4.7cm
  - **WI (socket, inner-outer):** 2.1-2.9cm
  - **WI (socket, inner-outer, back-front):** 2.2-2.8cm
  - **WE:** 133g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes only somewhat prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
- **1385. Copper alloy socketed axe (No. 69)**
  - **Type:** Hindon
  - **Length:** 9.2cm
  - **WI (cutting edge):** 4.3cm
  - **WI (socket, inner-outer):** 2.1-2.6cm
  - **WI (socket, inner-outer, back-front):** 2.1-2.6cm
  - **WE:** 118g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes somewhat less prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
- **1386. Copper alloy socketed axe (No. 50)**
  - **Type:** Hindon
  - **Length:** 9.3cm
  - **WI (cutting edge):** 4.2cm
  - **WI (socket, inner-outer):** 2-2.6cm
  - **WI (socket, inner-outer, back-front):** 1.7-2.5cm
  - **WE:** 121g

        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
    - **1387. Copper alloy socketed axe (No. 64)**
        - **Type:** Hindon
        - **Length:** 9.4cm
        - **WI (cutting edge):** 4.1cm
        - **WI (socket, inner-outer):** 2-2.6cm
        - **WI (socket, inner-outer, back-front):** 2.1-2.5cm
        - **WE:** 118g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
    - **Discussion:** The Hindon hoard was initially discovered whilst out metal detecting on cultivated land, but subsequently retrieved under controlled archaeological excavation. The object range is as follows: copper alloy socketed axes (33), copper alloy rings (39), copper alloy bracelets/bangles (2), copper alloy fragments of sheet metal, one still wrapped around a ring (3+), iron spearheads (3), iron sickle (1). While most of the copper alloy items are in good condition, the four iron artefacts are in need of conservation. The most striking characteristic of the hoard is the unusually high number of copper alloy rings (39) and the presence of sheet-metal. The number of complete Cast copper alloy socketed looped axes (33) is high, but not unreasonably so and certainly comparable to the number of axes from other contemporary English hoards, i.e. Figheldean Down (Wiltshire, nos. 1030-1050, 21 axes), Mylor (Cornwall, nos. 147-179, 33 axes) and Tower Hill (Oxfordshire, nos. 932-953, 21 axes) (Coombs, Northover and Maskall 2003; Coombs 1979, 253-268; Thomas 1989, 281; Huth 1997, 275). While the hoards from Figheldean Down and Mylor contained only socketed axes, the hoard from Tower Hill also contained 61 bracelet- and ring fragments and other ornaments, but many of the ring/bracelet fragments were bent, folded up and incomplete.
    - The socketed axes of the Hindon hoard may be divided into two groups: 1. Copper alloy axes of Sompting Type (3) and 2. high-tin copper alloy axes, one of which displays a unique decoration (31) which is unparalled in other high-tin copper alloy axes but resembles that of two axes from the Cambridge Area (nr. Ely?) (Ashmolean Museum: Acc. No. 1927.2623); University of Cambridge Museum of Anthropology and

Archaeology: Acc. No. 48.2525.A). These axes are of linear-decorated type which is related to Norfolk's high-tin copper alloy axes of East Rudham type. The two axes from the Cambridge area were probably made in the same mould and display on both faces one rib which bifurcates, both ends terminating in a circlet. The axe from Hindon displays a very similar decoration, only that there are two ribs curving outwards towards the end and terminating in what looks like a pellet-in-circlet at each end. The other three larger, heavier axes are of Sompting type. Plain and rib-and-pellet decorated Sompting type axes are known from Early Iron Age hoards such as Tower Hill (Oxfordshire, nos. 932-953), Kingston (Surrey, nos. 988-991) and Cardiff II (Vale of Glamorgan, nos. 1292-1293), while axes which were made from a high tin/low lead copper alloy are known from hoards found at Netherhampton (Wiltshire, nos. 1061-1202), Langton Matravers, Portland and Eggardon Hill (Dorset, nos. 226-598; 599-609 and 219-225) and East Rudham (Norfolk, nos. 845-886).

- The high-tin alloy axes from Hindon have no parallels in any of the other hoards: all of the other high-tin copper alloy axes from Dorset and Wiltshire are decorated with a variety of rib-and-pellet ornaments and the same kind of axes from Norfolk display an ornament of ribs along the sides of each face (i.e. linear-decorated). However, all of these axes share one important characteristic that distinguishes them from other Late Bronze Age and Early Iron Age socketed axes: they are characteristically cast with a high-tin content and have a very shiny silvery surface, probably due to an enrichment in eutectoid during casting by the so called 'tin-sweat' phenomenon. This shiny, silvery surface is still visible in patches on some of the axes from Hindon. It is possible that this 'tin-sweat' phenomenon was intentionally used in order to make the axes look shinier and more silvery in appearance. Casting iron was not possible at the time and most if not all early iron artefacts would have not had an intricate moulded decoration. Even the attachment of a small wrought iron side loop to a socketed axe made from wrought iron would have been difficult: after the initial attempt at making iron socketed axes which were almost exact copies of their copper alloy forerunners, people reverted back to making iron axes with a vertical hole for the handle. The presence of iron artefacts in a transitional hoard is fortuitous and not all that unusual for a hoard dating from the transition period or the Early Iron Age. Examples of copper alloy and iron artefacts found in association are known from Wiltshire (Melksham), the Vale of Glamorgan (Llyn Fawr) and possibly Sussex (Ferring) (Gingell 1979, 245-251; O'Connor 1980, 423, no. 224; Wiltshire Archaeological Register for 1972, 1973, 128; Wiltshire

Archaeological Register for 1981, 1982, 158; Thomas 1989, 282; Osgood 1995, 50-59; Aldsworth 1985, 4; Huth 1997, 275; Crawford and Wheeler 1921, 133-140; Fox and Hyde 1939, 369-404; Grimes 1939, no. 455a, 192-199; Savory 1976, 46-55; Savory 1980, no. 291-294; O'Connor 1980, 420, no. 218; Green 1985, 288-90; Thomas 1989, 281; Gerloff 2010, 182-7).

- It is likely that a greater number of transitional hoards included iron artefacts, but early iron objects were made from wrought iron and because they generally degrade very quickly (depending on soil conditions), they do not usually leave more than a trace in the ground. Without archaeological investigation of the findspot fragments may have been overlooked by finders in the past. Generally speaking, the counties of Wiltshire and Glamorgan are renowned for discoveries of earliest iron artefacts, for example socketed axes made from wrought iron (Penllyn Moor, Vale of Glamorgan) and iron sickles, knives, etc (All Cannings Cross, Wiltshire) (Cunnington 1922, 13-18; Cunnington and Cunnington 1923; British Museum Iron Age Guide 1925, 89; Dunning 1934, 270-1, fig. 2.1; Harding, D.W. 1974, 155-56, fig. 41; O'Connor 1980, 597, List 250, no. 3.). However, nearly all of these early iron artefacts come from settlements (e.g. All Cannings Cross) or middens such as Potterne and East Chisenbury (both Wiltshire). The context at Penllyn Moor (Glamorgan) is uncertain. Generally it appears that thetypes of early iron artefacts which were deposited in association with copper alloy artefacts were limited, however: the Hindon hoard contained three iron spearheads and one iron sickle. The same iron artefact types were discovered at Melksham (Wiltshire) and Llyn Fawr (Glamorgan). Hindon's iron sickle is only the second iron sickle discovered in a hoard context: the only other specimen was found deposited at Llyn Fawr (Vale of Glamorgan, South Wales), Two further iron spearheads were discovered in the River Avon at Melksham (Wiltshire), together with three copper alloy spearheads, one rapier blade and three phalerae (decorative horse trappings). The major difference between the finds is their overall condition (Melksham and Llyn Fawr were finds from clearly wet contexts which may have aided their excellent preservation) and the fact that while Llyn Fawr's sickle was socketed, Hindon's is tanged. Furthermore Hindon's spearheads are smaller than Llyn Fawr's and undecorated, very much unlike the larger of the two iron spearheads from Melksham. However, the smaller of Melksham's spearheads is an excellent parallel as it seems to be of the same size, shape and it is undecorated, too. It is important to note here that the above-mentioned early iron artefacts from Llyn Fawr and Melksham were predominantly deposited in association with socketed axes, items of horse trappings, harness decorations and vessels. This may help us

with the identification of the other, somewhat less straight-forward items in the Hindon hoard: the rings and fragments of riveted sheet metal. While no. 75 is most certainly a Late Bronze Age penannular bracelet with decorated terminals, it seems more likely that a number of shaped rings such as nos. 13, 15, 17 and 18 (lozenge-shaped cross section), no. 21 (hexagonal cross section) and no. 76 (grooved ring) were handles of sheet metal cauldrons of Class A1 (Type Tul-na-cross) and Class B1 (Types Llyn Fawr, Ballyshannon and Castlederg) (Gerloff 2010, Pl. 17, 7b; Pl.32, 14a; Pl. 33, 14f-h; Pl. 34, 15d, Pl. 54, 33c and Pl. 66, 37g). The fragments of sheet metal are difficult to identify. Even though they may well have been part of a copper alloy cauldron or bucket, we have no evidence for that. Most of the sheet metal has not been found folded around one of the rings, except for no. 36 and no. 47 which was folded around ring no. 46. The piece of folded sheet metal seems to have been semi-circular before it was folded around one of the rings with a simple circular cross section. This type of attachment does not correspond to the lay-out of a vessel of Late Bronze Age or Early Iron Age type. It seems more likely that the folded-over sheet was attached to a leather strap or belt and that this item was part of copper alloy horse harness. The other rings are all of different shapes and sizes, but their association with the rest of the hoard cannot be doubted. It seems most likely that the simple rings with circular cross-section were part of horse trappings or else, they could have been part of a chain from which a cauldron or other vessel was suspended over a fire. We have evidence for this kind of Early Iron Age 'feasting', possibly around a pyre, from Broom (Warwickshire) and Llanmaes (Vale of Glamorgan) (Watson 1999, 43-50).

- **Note:** The hoard was examined under the Treasure Act of 1996 (Amendment 2002) because prehistoric assemblages of 2+ artefacts made from any material should be considered Treasure from 1 January 2003 and need to be reported under the Act. The hoard has been allocated the Treasure Number 2012T46. It has been recorded on the Portable Antiquities Scheme's database under the Find ID WILT-9439A7.
- **References:** Unpublished.
- **Salisbury:** Salisbury Museum
- **Plates 136-141.**

1051. -1060. Manton Copse, Preshute, Wiltshire (centred on Manton Copse: SU1767)

- **Axe hoard**
- **Type:** Transitional
- **Description:** Hoard of ten socketed axes: a set of three axes (nos. 1051, 1052+1054) and another set of two axes (nos.

1055+1057) come from the same moulds; the remaining five axes were made in individual moulds.

- **1051. Copper alloy socketed axe (1)**
  - **Type:** South Eastern ribbed
  - **LE:** 11,3cm
  - **WI (cutting edge):** 4,9cm
  - **WI (socket, inner-outer):** 3,3-4,4cm
  - **LE (socket, back-front, inner-outer):** 3,4-4,5cm
  - **WE:** over 300g
  - **Description:** Cast copper alloy socketed looped axe with rough surface and dull turquoise-green patina with white, ochre and dark grey patches. The axe has one thick sub-rectangular upper mouth moulding. Beneath the mouth moulding is a collar of about 1cm in length and from this two long ribs are suspended on each face (5-5,5cm in length). Also, the edges of the faces bear a decorative rib (5-5,5cm in length). The casting seams show where the two halves of the mould were not aligned properly and there is a casting flaw (a hole of 1cm in diameter) in the collar on one side. The sides of the axes are reasonably straight – almost parallel – and the blade is only very slightly splayed. The loop is thick and broad and there is still some surplus bronze on top and underneath it. The cutting edge shows many dents and nicks and looks used, although re-sharpening marks are not recognisable.
  - **Note:** This axe, the next one and the fourth one were made in the same mould (nos. 1051, 1052+1054).
  - **Devizes:** Devizes Museum (D.M. Manton 1985.58)
  - **Plate 89**

1052. Copper alloy socketed axe (2)

- **Type:** South Eastern ribbed
- **LE:** 11,2cm
- **WI (cutting edge):** 4,95cm
- **WI (socket, inner-outer):** 3,4-4,35cm
- **LE (socket, back-front, inner-outer):** 3,2-4,5cm
- **WE:** over 300g
- **Description:** Cast copper alloy socketed looped axe with rough surface and dark brown-greenish patina. The axe has a sub-rectangular single mouth moulding. Beneath the mouth moulding is a ca. 1cm high collar and each face is decorated with two long ribs (5-5,5cm in length). There are additional ribs on the edges of the faces. The sides are straight – almost parallel – and the casting seams show that the two halves of the mould did not fit together properly. The loop is thick and broad

and retains some surplus bronze on its lower part. The blade is not splayed, and shows no signs of wear.
- **Devizes:** Devizes Museum (D.M. 1985.57 Manton)
- **Plate 89**

1053. Copper alloy socketed axe (3)
- **Type:** South Welsh/Stogursey
- **Devizes:** Devizes Museum (D.M. 1985.56)
- **LE:** 10,9cm
- **WI (cutting edge):** 5,6cm
- **WI (socket, inner-outer):** 3,4-5,0cm
- **LE (socket, back-front, inner-outer):** 2,8-4,1cm
- **WE:** over 300g
- **Description:** Cast copper alloy socketed looped axe with single rectangular mouth moulding. The mouth moulding is somewhat lop-sided (casting flaw). Each face is decorated with three long, crude ribs, ca. 6-7cm long. The sides are almost straight and the cutting edge is not splayed. The loop is very thin and fragile. The axe shows definite signs of wear (nicks, dents and re-sharpening marks in the lower part of the axe's body).

1054. Copper alloy socketed axe (two fragments; the upper and lower half) (4)
- **Type:** South Eastern ribbed
- **Devizes:** Devizes Museum (D.M. 1132) (upper half) and (1133) (lower half)
- **LE (whole axe):** 11,2cm
- **WI (cutting edge, slightly damaged):** 4,8cm
- **WI (socket, inner-outer):** 3,4-4,4cm
- **LE (socket, back-front, inner-outer):** 3,4-4,5cm
- **WE (upper half):** 133,23g
- **WE (lower half):** 207,55g
- **Description:** Two large fragments of a cast copper alloy socketed looped axe. Both fragments have a very rough, scaly surface and a dark metallic patina with green/ochre patches and flecks. The axe has a single mouth moulding, a collar and is decorated with two ribs on each face (see axes 1985.58 and 57). The casting flaw (surplus bronze below the loop) is clearly visible but there is no hole in the collar. The structure of the axe is flaky and scaly and at the breaks "bubbly" metal is visible – it seems that something went wrong during the casting process and the metal came out too porous. Furthermore, there are no recognisable signs of wear or resharpening
- **Note:** This axe was made in the same mould or it was made from the same mould template as nos. 1051+1052)
- **Plate 89**

1055. Copper alloy socketed axe (5)

- **Type:** South Eastern plain
- **LE:** 8,9cm
- **WI (cutting edge):** 4,9cm
- **WI (socket, inner-outer):** 3,1-4,1cm
- **LE (socket, back-front, inner-outer):** 3,0-4,1cm
- **WE:** 214.81g
- **Description:** Plain cast copper alloy socketed looped axe with smooth surface and dull green patina with ochre patches. The axe has no recognisable mouth moulding or collar, just a rectangular opening. The sides are curved outwards and the cutting edge is splayed. The sides are smooth. The axe has definitely been used and re-sharpened: There are re-sharpening marks along the cutting edge and half of the cutting edge is missing because of abrasion.
- **Note:** This axe comes from the same mould as no. 1057.
- **Devizes:** Devizes Museum (D.M. 1133 309, Manton Hoard)
- **Plate 90**

1056. Copper alloy socketed axe (6)

- **Type:** South Eastern ribbed
- **Devizes:** Devizes Museum (D.M. 1133, Manton Hoard)
- **LE (remaining):** 8,5cm
- **WI (cutting edge):** 4,7cm
- **WI (socket, inner-outer, remaining):** 2,6-3,0cm
- **LE (socket, back-front, inner-outer):** 2,7-2,3cm
- **WE:** 183,33g
- **Description:** Cast copper alloy socketed looped axe with rough surface and light turquoise patina with white and black flecks. The upper half is missing, but it seems likely that the axe had sub-rectangular mouth moulding. The axe was decorated with three ribs on each face, but they have been smoothed down and are almost invisible now. The sides of the axe are slightly diverging and the cutting edge is splayed; one corner is missing. It seems used although re-sharpening marks and other signs of wear can hardly be recognized anymore.

1057. Copper alloy socketed axe (7)

- **Type:** South Eastern (plain)
- **Devizes:** Devizes Museum (D.M. 1985.55, Manton)
- **LE:** 9,1cm
- **WI (cutting edge):** 5cm
- **WI (socket, inner-outer):** 3,0-4,0cm
- **LE (socket, back-front, inner-outer):** 3,3-4,3cm
- **WE:** 245,53g
- **Description:** Plain cast copper alloy socketed looped axe with dark golden/brown patina and a shiny surface

– the original surface was damaged during cleaning. For description see Mus. No. D.M. 1133 309, Manton Hoard.
    - **Note:** This axe comes from the same mould as no. 1055, Manton Hoard – the only difference between the two that one of them was treated (possibly for bronze disease?) and the other one was not – hence the different surface and patina.
    - **Plate 90**

1058. Copper alloy socketed axe (8)

- **Type:** Facetted, possibly Meldreth type
- **Devizes:** Devizes Museum (D.M. Manton Hoard, 306)
- **LE:** 10,7cm
- **WI (cutting edge):** 4,4cm
- **WI (socket, inner-outer):** 2,5-3,25cm
- **LE (socket, back-front, inner-outer):** 2,2-3,0cm
- **WE:** 173,88g
- **Description:** Cast copper alloy socketed looped axe with dull green patina and smooth surface. The axe is facetted with a long grooved neck/collar (13 grooves) and no mouth moulding. The mouth is not circular, but oblong and aligned with the cutting edge. The axe has three facets on each face and another “facet” on each side. The sides are diverging and the cutting edge is straight, but looks used: there are abrasions and clear re-sharpening marks. The loop is small and looks fragile.

1059. Copper alloy socketed axe (9)

- **Type:** South Eastern ribbed
- **Devizes:** Devizes Museum (D.M. 1985.54, Manton)
- **LE:** 10,5cm
- **WI (cutting edge):** 4,6cm
- **WI (socket, inner-outer):** 3-4cm
- **LE (socket, back-front, inner-outer):** 3,4-4,4cm
- **WE:** just over 300g
- **Description:** Cast copper alloy socketed looped axe with rough surface and green patina speckled with ochre spots. The axe has a sub-rectangular double mouth moulding with a thinner lower and thicker upper mouth moulding. The axe is decorated with 5 ribs on each face (4-5cm in length) and the edges of the faces are also enhanced by ribs. The sides are reasonably straight and the cutting edge is only slightly splayed. Half of the cutting edge is missing and the other half is covered in thick rough patina, but it seems likely that this axe has been used before it was discarded. The loop is thick, but not splayed.
- **Plate 90**

1060. Copper alloy socketed axe (10)

- **Type:** South Eastern ribbed
- **Devizes:** Devizes Museum (D.M. 1133, Manton Hoard)

- **LE (remaining):** 9cm
- **WI (cutting edge):** missing
- **WI (socket, inner-outer):** 3,1-4,2cm
- **LE (socket, back-front, inner-outer):** 3,6-4,5cm
- **WE:** 190,21g
- **Description:** Upper half of a cast copper alloy socketed looped axe with rough surface and turquoise-ochre patina with grey patches. The axe has a thick sub-rectangular mouth moulding, and a collar of about 1,25cm length. Below the collar, on each face, are three thick ribs (about 5,5-6cm long) and another four ribs enhance the edges of the two faces. The loop is not very broad, but long. The lower half of the axe is missing, but it seems that the sides of the axe were diverging and that the cutting edge was widely splayed. This axe was longer (and probably heavier) than the other axes of the hoard – at least by 1-2cm.
- **Plate 90**

- **References:**
  - Annable and Simpson 1964, no. 604-8.
  - Thomas 1989, 282
- **Devizes:** Devizes Museum (54-58.1985, DM1132, DM1133 (x2 and the second fragment of DM1132), DM 1133 309, DM Manton Hoard 306)
- **Plate 88**

1061. -1202. Salisbury, Wiltshire (centred on Netherhampton: SU110295)

- **Mixed/Multi-period hoard**
- **Type:** Portland; Blandford; Sompting, Variant Figheldean Down
- **Description:** The hoard includes material from the Early, Middle and Late Bronze Age and Early and Middle Iron Age. The Early Iron Age metalwork consists of at least 2 annular and 3 trapezoidal Hallstatt razors, socketed leather working knives, winged chapes, numerous Portland type axe and one axe of Sompting type, Figheldean Down variant.
- **Note:**
  - Not all of the material is in the possession of the British Museum and some of the bronzes are only known from drawings and pictures found in the finders/metal detectorist's possession. There are at least another two trapezoidal and one more annular razor, a socketed sickle and another 40 or so further Portland axes which are only documented in pictures. Their whereabouts are unknown.
  - **Socketed axes:**
    - Sompting type, Figheldean Down variant (one specimen, no. 1096)

        - Portland type (at least 141 specimens (Stead 1998, 113)). NB Only 35 were available for study at the time of the author's visit to the British Museum. They are nos. 1062-1095). According to the finder they were found "neatly arranged, end to end and spread fan-wise." (Stead 1998, 31)
        - Blandford type (at least one specimen, no. 1066)
      - **Chape:** Type Coplow Farm
      - **Razors:**
        - Trapezoidal: Three specimens (Types Feldkirch/ Bernissart (the counterpart to one of the Danebury razors) and Unterstall/Poiseul);
        - Annular: Two specimens (Type Wiesloch and Type Gramat)
    - **References:** Stead 1998.
    - **London:** British Museum, **Devizes:** Devizes Museum, **Salisbury:** Salisbury Museum (SM 1999.1); **Note:** The objects that are currently in the British Museum have not been given accession numbers yet. However, the objects are numbered: they have the initials of the last person to handle them and a number. This letter/number code will be used here.
    - **Shared Mould (Halves?):**
      - Axes nos. 1065 and 1082 share a half that comes from the same mould (Plate 93, lower right).
      - Axes nos. 1063 and 1082 share a half that comes from the same mould (Plate 93, lower left).
      - Axes nos. 1068 and 1083 are from the same mould (Plate 97).
      - Axes nos. 1077 and 1084 are from the same mould, but their individual colour, patina and surface finish suggest that they may not share the same metallurgy, because no. 1077 is dull shiny silver and has a less distinct pattern of decoration and no. 1084 is dull golden and has a fairly accurate decoration (Plate 98).
      - All Portland type axes from the Salisbury/Netherhampton Hoard were compared with the axes from the Blandford and Portland Hoards (Dorset), but there is no definite mould match. Nos. 1086 (Salisbury, Wiltshire) and 601 (Portland, Dorset) may have shared one half of the two-piece mould (Plate 98).

1061. Copper alloy socketed axe (1)

- **Type:** Portland
- **LE:** 9,2cm
- **WI (cutting edge):** 4,2cm
- **WI (socket, inner-outer):** 2,3-2,5cm
- **LE (socket, back-front, inner-outer):** 2,3-2,5cm

- **WE:** 79,1g
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration. The axe has dark grey patina with white and bright turquoise patches. The cutting edge shows signs of wear and the axe is still sharp. The axe is light and the metal is very thin. The socket is deep (above the blade there is only about 5mm of cast metal). The axe is decorated with three ribs (ca. 5,5cm) and pellets: there is one rib in the centre of each face and a rib along each of the four edges. However, there are also four additional ribs – one between the face and the casting seam on either side of the face. The decoration is very fine and while the ribs on the faces' edges meet in the corner of the blade, the other two ribs on the side meet about 0,8cm above the corner of the cutting edge. The axe has a very thin single mouth moulding.
- **Note:** This axe was discovered during the 1998 excavation of the site.
- **London:** British Museum (P1998 6-1, 3)

1062. Copper alloy socketed axe (2)

- **Type:** Portland
- **LE:** 9,3cm
- **WI (cutting edge):** 4,1cm
- **WI (socket, inner-outer):** 2,4-2,5cm
- **LE (socket, back-front, inner-outer):** 2,5-2,8cm
- **WE:** 84,5g
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration. It has a golden patina with white patches and green flecks. The axe is in as-cast condition with unfinished casting seams and unsharpened cutting-edge. The axe has a sub-rectangular double-mouth moulding with one small casting flaw (hole). The axe does not have facets, but the width of the face is slightly shorter than the width between the two casting seams. The edges of the face are decorated with ribs (4,5cm long) and there are two more ribs on each face. All four ribs end in slight not very pronounced pellets. It is a very thin casting.
- **London:** British Museum (P1998 6-1, 2)
- **Plates 91**

1063. Copper alloy socketed axe (3)

- **Type:** Portland
- **LE:** 9,2cm
- **WI (cutting edge):** 4,1cm
- **WI (socket, inner-outer):** 2,3-2,5cm
- **LE (socket, back-front, inner-outer):** 2,05-2,4cm
- **WE:** 76,4g
- **Description:** Cast copper alloy socketed looped axe with bright shiny silver patina and a few green flecks. The axe is in as-cast condition with casting seams still in place and an unsharpened, unused cutting edge. The axe has two faces and

four facets on either side and all edges are enhanced with rib that runs from the mouth moulding to the corner of the cutting edge. There is one rib in the centre of each face (5,2cm) that ends in a big circular pellet. The axe has a single mouth moulding that has an extremely thin ridge and the copper alloy above the cutting edge is ca. 7mm thick.
    - **London:** British Museum (Classical Numismatic Groups, Inc., no No. (CNG))
    - **Plates 91 and 93**

1064. Copper alloy socketed axe (4)
- **Type:** Portland
- **LE:** 9,8cm
- **WI (cutting edge):** 4,1cm
- **WI (socket, inner-outer):** 2,3-2,7cm
- **LE (socket, back-front, inner-outer):** 2,0-2,6cm
- **WE:** 84,9g
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration and shiny silver patina with white patches and green flecks. The axe is in as-cast condition. The axe has a rib (5cm in length) ending in a pellet on each face and ribs mark the edges of the face. There are four facets on each side, but the edges (apart from the casting seams) are not clearly marked with a rib. The socket has a single-mouth moulding. The metal is extremely thin, but the casting seam on the cutting edge adds an additional 1,5mm in length.
- **London:** British Museum (RS41)
- **Plate 92**

1065. Copper alloy socketed axe (5)
- **Type:** Portland
- **LE:** 9cm
- **WI (cutting edge):** 4,1cm
- **WI (socket, inner-outer):** 2,2-2,4cm
- **LE (socket, back-front, inner-outer):** 2,1-2,6cm
- **WE:** 87,8g
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration and with dull green patina and white patches and silvery metal shining through. The axe is in as-cast condition and resembles axe no. 1061. The axe is facetted and bears four facets on each side – all edges being enhanced by ribs. There is an additional rib (5,35cm in length) on each face and these ribs as well as the two ribs on the edges next to them end in a circular pellet. It has a singular sub-rectangular mouth moulding, which is very thin. The loop is very thin at its upper end and one of the faces had two casting flaws: the central rib is interrupted and somewhat bent and the three pellets slightly misplaced.
- **London:** British Museum (RS40)
- **Plates 92 and 93**

1066. Copper alloy socketed axe (6)

- **Type:** Blandford
- **LE:** 10,2cm
- **WI (cutting edge):** 5cm
- **WI (socket, inner-outer):** 2,5-3,0cm
- **LE (socket, back-front, inner-outer):** 2,6-3,2cm
- **WE:** 129,9g
- **Description:** Cast copper alloy socketed looped axe with bright silver patina with white and green patches. The axe, like the ones above, is wedge-shaped and in as-cast condition, though the casting seams are not very thick. It has a sub-rectangular double-mouth moulding with a thicker upper and thinner lower mouth moulding. It is not facetted but two ribs decorate each face. They are ca. 4cm long and parallel to the faces' two edges. The ribs are a bit flatter and wider than usual and do not end in pellets. Again, the metal above the cutting edge is only 1cm thick.
- **London:** British Museum (RS33)
- **Plates 93 and 94**

1067. Copper alloy socketed axe (7)

- **Type:** Portland
- **LE:** 9,8cm
- **WI (cutting edge):** 4,5cm
- **WI (socket, inner-outer):** 2,4-2,7cm
- **LE (socket, back-front, inner-outer):** 2,6-3,0cm
- **WE:** 91,1g
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration and a shiny silver patina with green and white patches and flecks. The axe has a single sub-rectangular mouth moulding and it is as-cast with an un-sharpened cutting edge. The axe is wedge-shaped and it seems as if the two parts of the mould were meant for two different axes. The decoration of this axe's two faces is the same, but on one face the ribs ending in pellets are 5,2cm long and on the other side ca. 6cm. The face with the longer ribs has slight facets – its edges being enhanced by a rib, too, and the whole side seems semi-circular in cross-section. The other face, however, decorated with shorter, more uneven ribs and pellets is sticking out more and does not have any facets – though is has slight ribs indicating a break on the sides. Because of these two different halves, the mouth is not evenly shaped, but has two different halves, too – just like the loop, where it is even more obvious.
- **London:** British Museum (RS34)
- **Plate 94**

1068. Copper alloy socketed axe (8)

- **Type:** Portland
- **LE:** 9,9cm
- **WI (cutting edge):** 3,9cm
- **WI (socket, inner-outer):** 2,2-2,6cm

- **LE (socket, back-front, inner-outer):** 2,2-2,8cm
- **WE:** 87,6g
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration and shiny silver patina with green and white patches. It is in as-cast condition and extremely thin. There is less than 1mm of copper alloy above the cutting edge. It has a single sub-rectangular mouth moulding and sharp ridges. It is somewhat facetted, but it does have two ribs on each side, which are not the ribs on the edges of the face. On each face there are three ribs (3,8cm) and pellets – evenly spaced. The four ribs on the two sides meet in the two corners of the cutting edges respectively.
- **London:** British Museum (RS35)
- **Plates 94 and 97**

1069. Copper alloy socketed axe (9)

- **Type:** Portland
- **LE:** 9,8cm
- **WI (cutting edge):** 4,5cm
- **WI (socket, inner-outer):** 2,2-2,8cm
- **LE: (socket, back-front, inner-outer):** 2,3-2,9cm
- **WE:** 103,7g
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration and a shiny silver patina with white and green patches. It is in as-cast condition although the cutting edge is fairly sharp – but this might be coincidence (the halves of the mould must have fitted perfectly). The axe is slightly facetted, with one rib between the face and the casting seam. The faces are decorated with three ribs (5,9cm in length) ending in pellets. The two outer ribs meet with the ribs between the face and casting seams in their pellets, merge and then run as one rib down to the corner of the cutting edge. The axe has a single sub-rectangular mouth moulding.
- **London:** British Museum RS36
- **Plate 94**

1070. Copper alloy socketed axe (10)

- **Type:** Portland
- **LE:** 10,8cm
- **WI (cutting edge):** 4,4cm
- **WI (socket, inner-outer):** 2,2-2,9cm
- **LE: (socket, back-front, inner-outer):** 2,1-3,0cm
- **WE:** 115,4g
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration and shiny silver patina with white and green patches. The axe is in as-cast condition. The cutting edge is slightly bent and there is about 1cm of copper alloy above it. The axe has a single sub-rectangular mouth moulding. The body is only slightly facetted – with two ribs enhancing the edges of the each face and two more ribs between the edges of the faces and the casting seams. The latter two pairs of ribs

meet (more or less exactly) about 2cm above the cutting edge, the two long ribs run all the way down from the mouth moulding to the corners of the cutting edge. There is a central rib on each face (5,2cm in length) ending in a pellet and there are another two pellets horizontally aligned with it, but without a rib.
- **London:** British Museum (RS37)
- **Plate 94**

1071. Copper alloy socketed axe (11)
- **Type:** Portland
- **LE:** 9,3cm
- **WI (cutting edge):** 4,1cm
- **WI (socket, inner-outer):** 2,3-2,7cm
- **LE: (socket, back-front, inner-outer):** 2,2-2,85cm
- **WE:** 109,3g
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration and shiny silver patina with large white and green patches – almost restricted to one face. The axe is as-cast condition, although there seem to be some smoothing marks on the sides – to smooth down the casting seams (?). It has a single mouth moulding with a very slight, almost unnoticeable back-to-front shape. Its decoration is three ribs ending in pellets on each face, two of the ribs enhancing the edges of the face, but not running down to the corners of the cutting edge. All three ribs have the same length (5cm). There is an interesting observation to be made on the more shiny and clear face: There is part of a “phantom” rib (ca 1cm long) visible on the inner side of the left hand outer rib, just next to and above the pellet. Another “phantom” rib can be just made out next to the right hand outer rib – just below the mouth moulding. The other face of the axe is too corroded to analyse it for “phantom ribs”.
- **London:** British Museum (RS38)
- **Plate 94**

1072. Copper alloy socketed axe (12)
- **Type:** Portland
- **LE:** 9,4cm
- **WI (cutting edge):** 3,9cm
- **WI (socket, inner-outer):** 2,1-2,5cm
- **LE (socket, back-front, inner-outer):** 2,2-2,55cm
- **WE:** 84,9g
- **Description:** Cast copper alloy socketed looped axe with extremely shiny silver patina and large white patches and white and green flecks. The axe has a single sub-rectangular mouth moulding. It is decorated with three ribs (4,5cm in length) and pellets on each face and is in as-cast condition.
- **London:** British Museum (RS39)
- **Plates 92 and 93**

1073. Copper alloy socketed axe (13)

- **Type:** Portland
- **LE:** 10,3cm
- **WI (cutting edge):** 4,5cm
- **WI (socket, inner-outer):** 2,3-2,6cm
- **LE: (socket, back-front, inner-outer):** 2,5-2,85cm
- **WE:** 100,7g
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration and shiny silver patina with large white patches and green flecks. The axe has a single sub-rectangular mouth moulding. The axe is basically in as-cast condition, but the cutting edge looks “sharper” than the cutting edges of the other axes. It has got nicks and dents and is slightly bent – it may have been sharpened in more recent times. The axe has three very pronounced ribs (6,1cm in length) ending in small pellets on each face starting just below the mouth moulding. The ribs are not meant to enhance the edges of the face although they run along them quite closely. The axe does not have any facets.
- **London:** British Museum (JF11)
- **Plate 95**

1074. Copper alloy socketed axe (14)

- **Type:** Portland
- **LE:** 9,2cm
- **WI (cutting edge):** 3,9cm
- **WI (socket, inner-outer):** 2,5-2,6cm (extremely thin)
- **LE: (socket, back-front, inner-outer):** 2,5-2,6cm (extremely thin)
- **WE:** 82,7cm
- **Description:** Cast copper alloy socketed looped axe with bright silver patina freckled with small patches of green and white. The two faces are decorated with three ribs (5,5cm and 5,8cm in length) ending in thick pellets, starting just below the mouth moulding. The two outer ribs do run along the edges of the face and enhance it, but stop below the pellets. The axe is in as-cast condition and has a very thin sub-rectangular single mouth moulding. The ribs on both faces have a different length, but that is the only indication that two halves of two different moulds may have been used – the overall look of the axe is symmetrical otherwise: the mouth is weak and thin on both sides and the two sides of the loop also match.
- **London:** British Museum (JF12)
- **Note:** Shares a mould link with No. 1080 (CJ Martin (iii))
- **Plate 95**

1075. Copper alloy socketed axe (15)

- **Type:** Portland
- **LE:** 9,1cm
- **WI (cutting edge):** 3,95cm
- **WI (socket, inner-outer):** 2,5-2,6cm
- **LE: (socket, back-front, inner-outer):** 2,2-2,5cm

- **WE:** 79,2g
- **Description:** Cast copper alloy socketed looped axe with bright shiny silver patina with green and white patches and rib-and-pellet decoration. The axe is in as-cast condition and has a very weak single square mouth moulding. It has no facets and on one face the two outer ribs of the decoration are running down to the corners of the cutting edge. On the other face the ribs seems to vanish below the pellets The central ribs are 5,6 and 5,8cms long, but the differences in the faces, nevertheless, do not indicate that the axe was made with two halves of two different moulds. The three pellets on the two faces are equally small and on the edges almost invisible.
- **London:** British Museum (JF13)
- **Plate 95**

1076. Copper alloy socketed axe (16)

- **Type:** Portland
- **LE:** 9,2cm
- **WI (cutting edge):** 3,9cm
- **WI (socket, inner-outer):** ca. 2,8 (damaged)
- **LE: (socket, back-front, inner-outer):** unknown, damaged
- **WE:** 80,2g
- **Description:** Cast copper alloy socketed looped axe with bright silver patina and white patched freckled with green flecks. The axe is missing one half of the socket and at the breaks it can be seen that the metal walls of the axe are only between 0,5mm and 1mm thick. The axe has a weak single mouth moulding and a decoration of three ribs and pellets on each face. However, there seems to be a casting flaw in the middle of one of the faces: the area around the pellet and the pellet are “muddled” up and the pellet itself hardly recognisable anymore. The ribs are ca 5,3cm long and all three run from the mouth moulding down to the pellet, but not further. The two outer ones enhance the edges of the face and the axe does not have more ribs on the sides or facets for that matter. Basically, the axe seems in as-cast condition with intact casting seams – however, the cutting edge is fairly sharp and the angle on one side seems to indicate that at one point in time, the cutting edge was actually sharpened. There are no clear re-sharpening marks.
- **London:** British Museum (JF14)
- **Plate 95**

1077. Copper alloy socketed axe (17)

- **Type:** Portland
- **LE:** 9,1cm
- **WI (cutting edge):** 3,7cm
- **WI (socket, inner-outer):** ca. 2,3-2,5cm (damaged)
- **LE: (socket, back-front, inner-outer):** uncertain, damaged
- **WE:** 73,9g

- **Description:** Cast copper alloy socketed looped axe with silver patina with green and white flecks. The socket is a very weak sub-rectangular mouth moulding. It is not facetted, but there are two ribs on each side indicating facets. These four ribs (4,1cm in length) “vanish” just before they reach the casting seam, but it seems likely they do not run all the way down to the corners of the cutting edge. There are also three very faint, weak ribs on each face ending in a very small pellet. The axe is in as-cast condition and there is about 2mm of solid metal above the cutting edge. Half of the mouth is missing, and at the break it can be seen that the wall of the axe was only between 0,5mm and 2mm thick.
- **London:** British Museum (JF1)
- **Plates 97 and 98**

1078. Copper alloy socketed axe (18)

- **Type:** Portland
- **LE:** 9,9cm
- **WI (cutting edge):** 4cm
- **WI (socket, inner-outer):** 2,3-2,6cm
- **LE: (socket, back-front, inner-outer):** 2,2-2,6cm (uncertain, damaged)
- **WE:** 75,6g
- **Description:** Cast copper alloy socketed looped axe with shiny silver patina freckled with white and green flecks. The axe is in as-cast condition with a single mouth moulding, probably square or slightly sub-rectangular. It has three ribs (5,3cm in length) terminating in pellets on each face and although the outer ribs enhance the edges of the faces, they do not run below the pellets. The axe is not facetted, but it has got two very faint slim ribs on either side of the face running from below the mouth to the two outer pellets.
- **London:** British Museum (JF2)
- **Plate 97**

1079. Copper alloy socketed axe (19)

- **Type:** Portland
- **LE:** 9,6cm
- **WI (cutting edge):** 4,2cm
- **WI (socket, inner-outer):** 2,3-2,5cm
- **LE: (socket, back-front, inner-outer):** 2,5-2,65cm
- **WE:** 74,8g
- **Description:** Cast copper alloy socketed looped axe with a dull golden patina and some casting flaws in the surface, especially on one face – around the pellets, below the mouth and above the cutting edge. The single sub-rectangular mouth moulding is weak and incomplete suggesting that there may not have been enough copper alloy to fill the mould. The decoration consists of three ribs (5,2cm in length) and pellets, which are more or less clearly visible – all in all they are very

faint and not very pronounced. The axe is in as-cast condition and the metal above the cutting edge is ca. 1,4cm thick.
    - **Note:** It seems as if a metallurgical sample has been taken from the axe – there is a hole in one of the sides near the blade.
    - **London:** British Museum (JF3)
    - **Plate 97**

1080. Copper alloy socketed axe (20)

- **Type:** Portland
- **LE:** 9,2cm
- **WI (cutting edge):** 3,9cm
- **WI (socket, inner-outer):** 2,4-2,6cm
- **LE (socket, back-front, inner-outer):** 2,3-2,6cm
- **WE:** 81,6g
- **Description:** Cast copper alloy socketed looped axe with dull silver/light golden patina and black, brown, green and grey patches and flecks. The axe has a square single thin mouth moulding with a casting flaw (not quite a hole, but a dent). The axe is decorated with three ribs and pellets on each face: The ribs are of different length on each side (5,5cm and 5,8cm respectively). The axe has no facets or ribs indicating edges of facets. The two outer ribs of the three ribs enhance the edges of the face, but only down to the pellet.
- **Note:** Shares mould with no. 1074. The length, alignment and position of the ribs on axe no. 1080 mirror the length, alignment and position of ribs on axe no. 1074, suggesting that two moulds were used to make both axes, but two halves of the two moulds were swapped so that both axes were made with one half of either mould.
- **London:** British Museum (CJ Martin (iii))
- **Plate 96**

1081. Copper alloy socketed axe (21)

- **Type:** Portland
- **LE:** 9,2cm
- **WI (cutting edge):** 4cm
- **WI (socket, inner-outer):** 2,5-2,7cm
- **LE (socket, back-front, inner-outer):** 2,4-2,8cm
- **WE:** 93,0g
- **Description:** Cast copper alloy socketed looped axe with unspoiled dull silver patina. The axe is decorated with four very pronounced ribs (just over 4cm in length) and pellets on each face, the two outer ribs enhancing the edges of the faces, but not running down to the corners of the cutting edge. The axe is in as-cast condition and possesses a thin sub-rectangular single mouth moulding. It does not have facets or ribs mimicking facets.
- **London:** British Museum (Schottlander)
- **Plate 96**

1082. Copper alloy socketed axe (22)

- **Type:** Portland
- **LE:** 9,2cm
- **WI (cutting edge):** 4,2cm
- **WI (socket, inner-outer):** 2,2-2,4cm
- **LE (socket, back-front, inner-outer):** 2,2-2,55cm
- **WE:** 76,9g
- **Description:** Cast copper alloy socketed looped axe with dull golden/silver patina and some white and green flecks. The axe has a single sub-rectangular mouth moulding. The casting seams have been removed; it has been re-sharpened and used. It has two different patterns of decoration on each side: One side bears four ribs (two enhancing the edges of the face and two between the face and the casting seam) and a single rib (5,3cm) ending pellet in the centre of the face, and the other face basically the same, only that the two ribs that enhance the edges of the face bear an additional pellet at the same height as the pellet at the end of the central rib.
- **Note:** This axe possible shares mould halves with nos. 1050 and 1063.
- **London:** British Museum (Charles Ede (D63))
- **Plates 93 and 96**

1083. Copper alloy socketed axe (23)

- **Type:** Portland
- **LE:** 9,3cm
- **WI (cutting edge):** 3,9cm
- **WI (socket, inner-outer):** 2,15-2,6cm
- **LE (socket, back-front, inner-outer):** 2,4-2,8cm
- **WE:** 101,3g (still soil inside)
- **Description:** Compare with no. 1068; the axes were most probably made in the same mould or from the same mould template.
- **London:** British Museum (CJ Martin (ii), D25)
- **Plates 96 and 97**

1084. Copper alloy socketed axe (24)

- **Type:** Portland
- **LE:** 9,1cm
- **WI (cutting edge):** 3,7cm
- **WI (socket, inner-outer):** 2,3-2,6cm,
- **LE (socket, back-front, inner-outer):** 2,1-2,6cm
- **WE:** 83,3g
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration. This axe probably came from the same mould as axe no. 1077, but it has a different patina: While axe no. 1077 is very dull, dark silver, this axe has a bright golden patina with large white and light green patches. Both are decorated with three ribs and pellets on each face, the outer ribs enhancing the edges of the face, but not running through to the edge of the cutting edge. Also, they have another four ribs running along the sides. The uneven decoration of this axe

suggests that it may have been made of less liquid and thicker, denser metal as it did not fill out the thin ribs and pellets in the mould properly, while the alloy used to make axe no. 1084 did.
- **London:** British Museum (CJ Martin (ii), D56)
- **Plate 96 and 98**

1085. Copper alloy socketed axe (25)
- **Type:** Portland
- **LE:** 8,9cm
- **WI (cutting edge):** 4,1cm
- **WI (socket, inner-outer):** 2,1-2,4cm
- **LE (socket, back-front, inner-outer):** 2,1-2,6cm
- **WE:** 83g
- **Description:** Cast copper alloy socketed looped axe with dull golden-brown patina and large white and green patches. The decoration is the same as the decoration on axe no. 1063: without being facetted, it displays four extremely pronounced ribs running down from the single mouth moulding to the corners of the cutting edge and another, shorter, rib (5,7cm in length) in the centre of the face, this one ending in a large pellet. It has no definite back-to-front shape and is in as-cast condition. Although it looks very much like axe no. 1063, they were not made in the same mould or shared the same mould template.
- **London:** British Museum (CJ Martin (i), D1)
- **Plate 96**

1086. Copper alloy socketed axe (26)
- **Type:** Portland
- **LE:** 10,9cm
- **WI (cutting edge):** 4,8cm
- **WI (socket, inner-outer):** 2,3-2,8cm
- **LE (socket, back-front, inner-outer):** 2,5-2,95cm
- **WE:** 104,4g
- **Description:** Cast copper alloy socketed looped axe with a dull golden patina and bright green and dark brown patches. The axe has a single sub-rectangular mouth moulding. The axe is not facetted, but like the others rather oval in cross-section. However, it bears a very pronounced rib between face and casting seam which runs from below the mouth moulding down to almost the corners of the cutting edge. Both faces are decorated with three ribs (ca. 4,7cm in length) terminating in pellets. The outer ribs enhance the edges of the faces, and they appear fainter below the pellets. With nearly 11cm in length, this axe is much longer than the other Portland type axes.
- **London:** British Museum (JG5)
- **Plate 98**

1087. Copper alloy socketed axe (27)
- **Type:** Portland
- **LE:** 9,6cm

- **WI (cutting edge):** 4,1cm
- **WI (socket, inner-outer):** 2,4-2,6cm
- **LE (socket, back-front, inner-outer):** 2,2-2,6cm
- **WE:** 81,5g
- **Description:** Cast copper alloy socketed looped axe with very shiny silver patina and some green and white flecks and patches. The axe is in as-cast condition, has a single square mouth moulding and its metal is just as thin as that of the others. Its faces are decorated with three ribs (4cm in length) terminating in small pellets, but continuing below them. There are four not very pronounced ribs – each individual one set between casting seam and edge of face, running down to the corner of the cutting edge, but the axes cannot be called facetted. The casting seams were not trimmed, but are not very pronounced.
- **London:** British Museum (S6)

1088. Copper alloy socketed axe (28)

- **Type:** Portland
- **LE:** 9,3cm
- **WI (cutting edge):** 4cm
- **WI (socket, inner-outer):** 2,3-2,6cm
- **LE (socket, back-front, inner-outer):** 2,4-2,7cm
- **WE:** 71,4g
- **Description:** Damaged cast copper alloy socketed looped axe with dull silver patina and large white and light turquoise patches. It has a single sub-rectangular mouth moulding and an unusual decoration of three ribs which are not terminating in a pellet. There is a central rib and two ribs on either side of it, but it is not clear whether the rib continues all the way down to the corner of the cutting edge. Also, there are four ribs – one each between casting seam and edge of face – which run from below the mouth moulding all the way down to the corner of the cutting edge. The central rib on one of the faces is ca. 4cm long before it merges with the surface. On the other face, a large chunk of the face and the side below the loop is missing, showing how thin the walls of the axe are (0,3mm).
- **London:** British Museum (S7)

1089. Copper alloy socketed axe (29)

- **Type:** Portland
- **LE:** 9,2cm
- **WI (cutting edge):** 4,2cm
- **WI (socket, inner-outer):** 2,3-2,4cm
- **LE (socket, back-front, inner-outer):** 2,05-2,55cm
- **WE:** 85,5g
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration: its pellets are slightly thicker and rounder and the size of the axe is unique. The axe has a single sub-rectangular mouth moulding and is bright silver with green and white patches and flecks. It is in as-cast condition.

- **London:** British Museum (S8)

1090. Copper alloy socketed axe (30)

- **Type:** Portland
- **LE:** 9,4cm
- **WI (cutting edge):** 4,1cm
- **WI (socket, inner-outer):** 2,5-2,6cm
- **LE (socket, back-front, inner-outer):** 2,3-2,65cm
- **WE:** 77,3g
- **Description:** Cast copper alloy socketed looped axe with silver-black patina with white and green patches and flecks and a simple decoration. There are three very thin ribs on the edges of the faces (ca. 3,5-4cm in length) and another thin rib (3,5cm in length), in the centre of each face. The decoration is similar to no. 1088, but the two axes do not come from the same mould.
- **London:** British Museum (S4)

1091. Copper alloy socketed axe (31)

- **Type:** Portland
- **LE:** 9cm
- **WI (cutting edge):** 4,2cm
- **WI (socket, inner-outer):** 2,1-2,5cm
- **LE (socket, back-front, inner-outer):** 2,0-2,5cm
- **WE:** 88,4g
- **Description:** Cast copper alloy socketed looped axe with shiny silver surface with a few patches of green and white patina, and single square mouth moulding. It is in as-cast condition and is decorated with three ribs terminating in pellets on each face. It does not have facets or ribs indicating facets. The two outer ribs on the faces are aligned with the edges of the face. The ribs are ca. 5cm long.
- **London:** British Museum (M1068)

1092. Copper alloy socketed axe (32)

- **Type:** Portland
- **LE:** 9,3cm
- **WI (cutting edge):** 4,1cm
- **WI (socket, inner-outer):** 2,4-2,5cm
- **LE (socket, back-front, inner-outer):** 2,3-2,7cm
- **WE:** 74,9g
- **Description:** Cast copper alloy socketed looped axe with dull silver patina and few white and green patches and flecks. It is decorated with three ribs (4,2cm in length) terminating in pellets with additional ribs between the edge of the faces and the casting seams.
- **London:** British Museum (M1069)

1093. Copper alloy socketed axe (33)

- **Type:** Portland
- **LE:** 9,3cm
- **WI (cutting edge):** 4,1cm
- **WI (socket, inner-outer):** 2,2-2,5cm

- **LE (socket, back-front, inner-outer):** 2,25-2,7cm
- **WE:** 82,0g
- **Description:** Cast copper alloy socketed looped axe with dull silver brown patina and green and white flecks. The axe strongly resembles no. 1092, although the pellets are thicker and there are casting flaws close to the ribs.
- **London:** British Museum (M1070)

1094. Copper alloy socketed axe (34)

- **Type:** Portland
- **LE:** 9cm
- **WI (cutting edge):** 3,9cm
- **WI (socket, inner-outer):** 2,4-2,8cm
- **LE (socket, back-front, inner-outer):** 2,2-2,8cm
- **WE:** 67,3g
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration. The axe has a single square mouth moulding and is bright silver with white patches on the surface. The faces of the edge are enhanced by ribs, which run from the mouth moulding to the edge of the cutting edge. There is also one single long rib (6,2cm) on each face. One of the pellets and a tiny bit of the surface surrounding it are missing. The axe has been sharpened and used, though probably not very efficiently as the metal of the axe is very thin.
- **Note:** The axe probably belongs to the Netherhampton A hoard.
- **London:** British Museum (temporary in the BM, no. 778T/Jirta (P27066), tag reads: “votive tin palstave, Dorchester (Dorset), votive deposit, 1985”)

1095. Copper alloy socketed axe (35)

- **Type:** Portland
- **LE:** 9,7cm
- **WI (cutting edge):** 4,7cm
- **WI (socket, inner-outer):** 2,2-2,4cm
- **LE (socket, back-front, inner-outer):** 2,1-2,7cm
- **WE:** 82,0g
- **Description:** Cast copper alloy socketed looped axe with dull muddy-golden patina, sub-rectangular double mouth moulding and rib-and-pellet decoration. The decoration consists of four ribs (ca. 4,1cm in length) and pellets on each face, the outer ribs only enhancing the edge of the faces until they terminate in the pellet. The axe looks very much like no. 1062 and they could have shared the same mould.
- **London:** British Museum (temporary in the BM, no. 777T/JW6T, small tag reads “votive tin looped palstave, Dorchester (Dorset), votive deposit, 1985”)

1096. Copper alloy socketed axe (36)

- **Type:** Sompting, Figheldean Down variant
- **LE:** 13,6cm
- **WI (cutting edge):** 5,7cm

- **WI (socket, inner-outer):** 3,1-4,1cm
- **LE (socket, back-front, inner-outer):** 2,9-3,9cm
- **WE:** 460,8g
- **Description:** Large copper alloy socketed looped axe with patchy dark/light green/reddish patina and in as-cast condition. The axe has a double-mouth moulding – a larger upper mouth moulding with a smaller one underneath. The mouth is square. The axe is decorated with three very pronounced but not very evenly spaced ribs (4,5cm in length) on each face. They do not terminate in pellets.
- **Note:** It is highly likely that this axe was made in the same mould or made from the same template as four of the axes from the Figheldean Down hoard (Tilshead, Wiltshire, nos. 1033-1036, 1043, 1045 and 1048) and the single find from near Stockbridge, Hampshire (no. 1394).
- **London:** British Museum (M1071 ex McAlpine Collection)
- **Plates 80, 82 and 99**

1097. Copper alloy socketed axe (37)

- **Type:** Portland
- **LE:** 9,7cm
- **WI (cutting edge):** 4,2cm
- **WI (socket, inner-outer):** 2,4-2,6cm
- **LE (socket, back-front, inner-outer):** 2,2-2,6cm
- **WE:** 98,97g
- **Description:** Cast copper alloy socketed looped axe with shiny silver surface colour which suggests a high tin content. The axe has a single mouth-moulding with sub-rectangular alignment. It is a very thin casting, in as-cast state and unsuitable as a tool – there are no re-sharpening marks or signs of use. The casting seams are intact in most places, even along the blade. The faces of the axe are decorated with three ribs (4,6-4,7cm in length on both faces) terminating in pellets. The two outer ribs are on the edges of the faces, but the ribs do not continue on below the pellets. However, there is an additional rib between the edges of the faces and the casting seams on either side of the axe. These ribs give the axe the appearance of having facets which is does not have.
- **Salisbury:** Salisbury Museum (1999.1)
- **Plate 99**

Add.: 1410.-12. Tisbury Area, Wiltshire (ST91792924)

- **Mixed Hoard**
- **Type:** Multi-period hoard: Portland and Blandford types
- **Description:** Artefacts from a small dispersed base metal hoard, comprising a Middle Bronze Age side-looped socketed spearhead (in two pieces), an incomplete socketed gouge, an awl and three fragments of possibly up to three socketed axes.
- **1410: Socketed axe fragment**

        - **Type:** Blandford
        - **LE (fragment):** 42.2mm
        - **WI (fragment):** 23.45mm
        - **Thickness (fragment):** 2.64mm
        - **Weight:** 14.58g
        - **Description:** Small body fragment of a cast copper alloy socketed looped axe with ribbed decoration. The fragment comes from the upper part of the axe, consisting of part of one face and part of one side. The fragment shows two prominent ribs flanking the long edge of the face, with possibly the worn remains of another towards the inside of the face. Its surface is corroded and of dark grey-greenish colour.
    - **1411: Socketed axe fragment**
        - **Type:** Blandford or Portland
        - **LE (fragment):** 24.19mm
        - **WI (fragment):** 19.79mm
        - **Thickness:** 4.48mm
        - **Weight:** 6.43g
        - **Description:** Small mouth fragment of a cast copper alloy socketed looped axe, consisting of part of the mouth and body. The mouth moulding is flanked by a rib below. The part of body below this rib consists of a corner (part face, part side). The surface shows only little corrosion and has a silvery sheen.
    - **1412: Socketed axe fragment**
        - **Type:** Undetermined; probably Blandford or Portland
        - **LE (fragment):** 13.29mm
        - **WI (fragment):** 12.09mm
        - **Thickness:** 3.98mm
        - **Weight:** 2.12g
        - **Description:** Fragment of a cast copper alloy looped socketed axe, retaining part of the mouth moulding and showing a prominent casting flash.
    - **References:** Portable Antiquities Scheme database www.finds.org.uk: WILT-0594F7; Treasure Case tracking number: 2010T647.
    - **Location:** Returned to finder after Treasure inquest and conclusion of Treasure proceedings.

Add: 1388.-1392. Vale of Wardour, Wiltshire (ST9251926901)

- **Mixed hoard**
- **Type:** Multi-period hoard (Armorican (1); Sompting, Tower Hill variant (1); Blandford (2) and uncertain (1))

- **Description:** The hoard was initially discovered late in 2011 by a metal detectorist whilst out detecting on cultivated land, but subsequently retrieved under controlled archaeological excavation. The hoard contains c.114 bronze weapons, tools and ornaments

dating from the Bronze Age to the Early Iron Age and was probably buried in or towards the end of the 6th century BC. The object range of the hoard's contents is as follows: rapiers (2), swords (7), spearheads (29), socketed axes (9), palstaves (8), flat axe (1), socketed gouges (15), other wood-working tools (12), sickles (6), knives (6), chapes (2), dress pins (5), bracelet/collar (1), ring (1), button (1), toggle (1), strap fitting/end (1), razors (2), unidentified object (6). The percentages of the different artefact types are similar although wood-working tools such as axes, gouges, chisels, awls and punches outweigh the other classes of weapons and ornaments.

- **Discussion:** There were only nine socketed axes amongst the 114 objects that the hoard contained. This is a considerably smaller percentage than in the Salisbury hoard where one in three objects was a socketed axe (Stead 1998, 113). Four of Wardour's socketed axes (/34\, /36\, /60\ and /68\) were typical Late Bronze Age types such as South Eastern, Everthorpe and Meldreth type axes which are well-known from Late Bronze Age hoards from Yorkshire, East Anglia and Kent, but are generally uncommon in Wiltshire and Southern England. The remaining five axes can be assigned to the Llyn Fawr metalwork assemblage: two axes of Blandford type (nos. 1388-1389), one axe of Sompting type, Tower Hill variant (no. 1390), one small Armorican axe, probably of Type Couville (no. 1391) and lastly, one axe which is also unusually small and may have been used as a pendant rather than an axe, mainly because its loop is, unusually, on one of the faces and not at one of its sides (no. 1392). In Britain, the inclusion of an Armorican axe in a mixed hoard is rare. The only parallel for a mixed or multi-period hoard that contains an Armorican axe is the hoard from Danebury which included the upper part of a larger Armorican axe (no. 689). The addition of two Blandford type axes (nos. 1388-1389) in the Wardour hoard is not unusual. This axe type is known from hoards found predominantly in Dorset (Blandford, no. 211, and Sixpenny Handley, no. 610-617), but also in the Bristol area (King's Weston Down, no. 56) and in Wiltshire (Salisbury, no.1066). Blandford axes are known to occur in association with Portland axes and small, thinly cast, high-tin gouges which were, like Portland and Blandford axes, deposited in as-cast condition. While there may have been less than five gouges of this type included in the Salisbury hoard (Stead 1998, pl. 3 and 6), there were eight specimens in the Vale of Wardour hoard (/40\, /40a\, /42\, /44\, /55\, /56\, /71\, /82\) which is the largest number encountered in an Early Iron Age hoard so far. Like Portland and Blandford type axes, they have never been found singly but always in association with other Portland or Blandford axes. Even though none of these gouges have been metallurgically analysed so far, their silvery patina and as-cast condition suggests that they were made using the same technique that was used for casting Portland and Blandford axes. Apart from

these Late Bronze and Early Iron Age socketed axes and gouges, the bulk of the Vale of Wardour hoard contains artefacts like palstaves, rapier- and sword fragments and spearheads which all date from the Middle and Late Bronze Age. Furthermore, there are also a small number of artefacts which are part of the Llyn Fawr metalwork assemblage dating from the Earliest Iron Age. The latest artefacts in this hoard are likely to be the two unidentified objects which resemble pommels of Early Iron Age dagger hilts, nos. /69\ and /93\ (Ben Roberts pers. comm.). The thinner, more fragile-looking object (/93\) finds an almost exact, albeit more complete, parallel in the Salisbury/Netherhampton hoard (1998.0901.202/British Museum database no. 509; Stead 1998, pl. 5), which it has been catalogued as 'copper alloy multi-armed ornament with one disc-ended arm'. Both objects have a central bar terminating in a small more or less concave disc at the top and two arms curving outwards from the bottoms. The two arms are broken but probably went on to curve all the way around, their ends possibly touching the rim of the central disc. These objects resemble the hilt terminals/pommels of Continental Early Iron Age (Hallstatt D) antenna-hilted daggers. This dagger type, represented at the eponymous Hallstatt cemetery in graves 13/1939 (Kromer 1959, Tafel 210, 9), 11/1889 (ibid, Tafel 205, 5a), 32/1939 (ibid, Tafel 205, 2a) and 702/1 (ibid, Tafel 143) is a typical find in Continental Early Iron Age contexts but they are considerably rarer in Britain. It looks very different from object /93\, but there is a chance that this, too, is the hilt fragment of a contemporary antenna-hilted dagger, although probably of a different type. The British Museum Catalogue of 1953 shows an anthropoid dagger with an iron blade and bronze hilt which shows similar characteristics (BM Catalogue 1953, 58, fig. 22, 4), although the V-shaped arms or 'guard' of this dagger's hilt are wider apart and not as narrow. However, even though the artefacts are certainly contemporary with (or slightly later than) the other Early Iron Age objects in the hoard, their identification needs further investigation and verification. Another artefact type that occurs in the Vale of Wardour hoard (but not in the Salisbury hoard) which is very typical of Continental Early Iron Age Hallstatt C and D contexts are knobbed bracelets. On the Continent, they frequently occur in grave assemblages, both larger and smaller varieties with differently-sized knops and bosses. In Britain, however, knobbed bracelets are generally rare. Looking at the Wardour hoard's fragment's hinged link and dowel attachment, the best parallel may be the well-known 'Clynnog collar' from Hendre Bach, Clynnog, Caernarvonshire (National Museum Wales: 41.109; Hemp 1931, 354-5; O'Connor 1980, 598). It is a much larger object, but it has a very similar opening/closing and securing mechanism which is otherwise unparalleled amongst the small corpus of knobbed/bossed ornaments of the British Isles. Most of the bracelets and neckrings of the Late Bronze and Early

Iron Age have an opening to facilitate wear, but most bracelets are solid without opening. It has been argued that the Clynnog collar should be dated to the later Iron Age La Tène phase rather than the Hallstatt period, because of its advanced hinge-mechanism and fine craftsmanship (Savory 1976, 26; O'Connor 1980, 259), but the similarity between the knobbed/bossed bracelets of the Hallstatt period is striking. O'Connor suggested that since the collection of knobbed bracelets from Mountbatten (Plymouth, Devon) should be dated to the Early Iron Age, so should be the Clynnog collar, as the bracelets would provide a valid British parallel for it (ibid., 259). However, somewhat more complicated hinge-mechanisms as seen in the Clynnog collar and the fragment from Wardour, are more common in the Early La Tène and British examples come from the Iron Age cemetery of Wetwang Slack on the Yorkshire Wolds (Dent 1982, 444-6, fig. 6). Thus, the most likely date for Wardour's knobbed bracelet or collar fragment would be similar to that of the fragment /69\, late Hallstatt D, since it displays the advanced hinge-mechanism of the La Tène period while still retaining the bossed ornament of the Hallstatt period. While the small bag-shaped chape /94\ is a Late Bronze Age Atlantic type, the winged chape /26\ is another Early Iron Age type that derived from the earlier bag-shaped chapes. Winged chapes occur both in Britain and on the Continent and date from Hallstatt C which makes them older than the dagger and knobbed bracelet/collar fragments discussed above. The winged chape resembles the chapes from the Thames at Wandsworth (British Museum: BM WG 1779) and another, probably from the Thames (British Museum: BM 1875, 4-1, 36), but it has a more V-shaped and less rounded bottom. A very good parallel comes from Tombelle A, Cazevieille (Herault, France) (Inv. Arch. F7; Cowen 1967, fig. 13). Gerloff (after Rieth 1942) suggests that chapes such as this, with straight wings can be assigned to the earliest Iron Age Hallstatt C0 or Hallstatt C1a (Gerloff 2004, 146, fig. 17.9 (no. 10)). An insular type is object /10\, the larger of the two socketed sickle fragments. While the other, /27\, dates from the Late Bronze Age, sickle /10\ is related to the socketed, heeled sickles of the British Early Iron Age. Heeled sickles are known from Early Iron Age hoards, such as Cardiff II and Llyn Fawr (Vale of Glamorgan, Wales), but also as single finds (e.g. Icklingham, Suffolk (British Museum: BM 1904, 10-21, 1) and Southacre, Norfolk (Norwich Castle Museum: NCM 1908.22.34). The three most similar parallels, however, are sickles with conical sockets and come from the Oxford region (Ashmolean Museum: 1993.134), Dores (nr. Inverness: National Museums Scotland: NMS.X.DO29) and Winterbourne Monkton (Wiltshire: Devizes Museum: D.M.1124). The socketed sickle from Winterbourne Monkton is probably the closest parallel stylistically and geographically, even though it has a small loop at the back of the socket and it lacks the Wardour sickle's midrib on the curved

blade. According to Fox, non-heeled socketed sickles with conical sockets such as fragment /10\, slightly predate heeled socketed sickles (Fox 1939, 223) and it may be suggested here that /10\ dates from the Late Bronze Age-Early Iron Age transition period rather than to the Early Iron Age.

- **1388. Copper alloy socketed axe**
  - **Type:** Blandford
  - **LE:** 103.49mm
  - **WI (cutting edge):** 54.95mm
  - **WI (socket, outer):** 32.87mm
  - **LE (socket, back-front, outer):** 35.24mm
  - **WE:** 158.44g
  - **Description:** Cast copper alloy socketed looped axe, probably of Blandford type. Side-looped, high tin, four ribs on each face, double mouth moulding, straight triangular blade, casting flashes prominent. These axes are characteristically cast with a high-tin content and have a very shiny silvery surface, probably due to an enrichment in eutectoid during casting by the so called tin-sweat phenomenon.
- **1389. Copper alloy socketed axe**
  - **Type:** Blandford
  - **LE:** 96.95mm
  - **WI (cutting edge):** 49.99mm
  - **WI (socket, outer):** 30.76mm
  - **LE (socket, back-front, outer):** 31.24mm
  - **WE:** 146.7g
  - **Description:** Cast copper alloy socketed looped axe, probably of Blandford type, similar to last. Side-looped, two ribs only visible on one face (other face obscured by concretion), single mouth moulding, straight triangular blade, casting flashes prominent. These axes are characteristically cast with a high-tin content and have a very shiny silvery surface, probably due to an enrichment in eutectoid during casting by the so called tin-sweat phenomenon.
- **1390. Copper alloy socketed axe**
  - **Type:** Sompting, Tower Hill variant
  - **LE:** 106.41mm
  - **WI (cutting edge):** 56.72mm
  - **WI (socket, outer):** 36.63mm
  - **LE (socket, back-front, outer):** 36.11mm
  - **WE:** 300+g
  - **Description:** Cast copper alloy socketed looped axe, probably of Sompting type, Tower Hill variant. Side-looped, single mouth moulding, straight body flaring to curved cutting edge, casting flashes prominent. Undecorated with a subrectangular mouth moulding; related in size and shape to an equally smallish Sompting type axe recovered at the Early Iron Age pyre/feasting site at Llanmaes, Vale of Glamorgan (nos. 1405-

1407ff). Other parallels come from the Falls of Snowdon (nos. 1287) and Lochgair, Argyllshire (no. 1248).

- **1391. Copper alloy socketed axe**
  - **Type:** unknown
  - **LE:** 52.56mm
  - **WI (cutting edge):** 33.72mm
  - **WI (socket, outer):** 23.95mm
  - **LE (socket, back-front, outer):** 20.74mm
  - **WE:** 54.29g
  - **Description:** Late Bronze Age or Early Iron Age socketed axe with flat hexagonal cross-section, small with single loop on one face only, single mouth moulding, side facetted below mouth moulding, triangular body with straight cutting edge, damage at one corner, casting flashes prominent. The loop on one of the faces rather than its side suggests a possible use as a pendant.
- **1392. Copper alloy socketed axe**
  - **Type:** Armorican, Couville variant
  - **LE:** 78.72mm
  - **WI (cutting edge):** 30.11mm
  - **WI (socket, inner-outer):** 22.77mm
  - **LE (socket, back-front, inner-outer):** 25.9mm
  - **WE:** 100.11g
  - **Description:** Small cast copper alloy socketed looped axe of Late Bronze or Early Iron Age type, possibly Armorican type, Couville variant. Side-looped, single mouth moulding, body flares gently to straight triangular cutting edge, casting flashes prominent on loop side only. The axe is similar to two single finds from Topcliffe (no. 1241) and the Settle Area (no. 1238), both North Yorkshire
  - **Note:** After having been examined under the Treasure Act of 1996 (Amendment 2002) it has now been acquired by Salisbury Museum.
  - **References:** Treasure Reference Number: 2011T684; Portable Antiquities Scheme Finds ID: WILT-E8DA70.
  - **London:** Salisbury Museum.

Single finds:

1203. Oldbury Hill/Camp, Calne, Wiltshire (centred on hillfort: SU050696)

- **Copper alloy socketed axe**
- **Type:** Linear-decorated
- **LE:** 10,6cm
- **WI (cutting edge):** 5,4cm
- **WI (socket, inner-outer):** 2,5-3,25cm
- **LE (socket, back-front, inner-outer):** 2,9-3,5cm
- **WE:** 198,05g

- **Description:** Cast copper alloy socketed looped axe with smooth and shiny surface and dark grey patina. The axe is decorated with grooves and two ribs along the edges of the two faces, making it look similar to an East Rudham type axe. It has a single sub-rectangular mouth moulding and diverging sides. The cutting edge is not splayed and the whole axe is wedge-shaped. The main difference between this axe and East Rudham type axes is that this one is heavier and was used – strongly suggested by marks of wear and re-sharpening.
- **References:**
  - Annable and Simpson 1964, no. 610.
  - O'Connor 1980, 585, List 227, no. 29.
- **Devizes:** Devizes Museum (D.M. 1120)
- **Plate 100**

1204. Chilton Foliat, Wiltshire (centred on village: SU315705)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **LE:** 11,6cm
- **WI (cutting edge):** 3,15cm
- **WI (socket, inner-outer):** 2,3-3,0cm
- **LE (socket, back-front, inner-outer):** 3,1-3,9cm
- **WE:** 248,22g
- **Description:** Cast copper alloy socketed looped axe with rough surface and greyish-green patina with white and beige patches. The axe is in as-cast condition.
- **References:** Cunnington and Goddard 1934, 72, no. 311.
- **Devizes:** Devizes Museum (D.M. 1122, 311)
- **Plate 101**

Add: 1402. Cold Kitchen Hill, Brixton Deverill, Wiltshire (ST 845 380) –

- **Early Iron Age settlement**
- **Description:** The settlement revealed, apart from Early Iron Age pottery, numerous metal artefacts of bronze and iron, e.g. brooches, chains, tweezers, knives and pins. Most of the material is dates from the later Iron Age (La Tène), but few finds come of the Early Iron Age occupation, most importantly the early iron socketed axe-head, ring-headed pins and the bracelet fragment (see below).
- **Iron socketed axe**
  - **Type:** Earliest Iron Axe
  - **Notes:** Found during excavations in 1925, but stratigraphical position not recorded.
  - **References:**
    - Rainbow 1928, no. 7.
    - Cunnington and Goddard 1934, 119, Pl. XXXIV.
    - Manning and Saunders 1972, 283.

- **Museum:** Devizes.

1205. Coombe Bissett, Wiltshire (centred on village: SU105265)

- **Copper alloy socketed axe**
- **Type:** Sompting type, Cardiff II variant
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration. It has a square mouth with double mouth moulding and the sides of the axe almost parallel. The faces of the axe are decorated with three evenly spaced ribs terminating in a pellet.
- **References:** Unpublished.
- **Private Possession** (recorded in Salisbury Museum, ID 1034)

1206. Donhead St Mary, Wiltshire (centred on village: ST905245)

- **Copper alloy socketed axe**
- **Type:** Transitional
- **Description:** Cast copper alloy socketed looped axe with decagonal cross-section.
- **References:**
  - Moore and Rowlands 1972, 30, no. 46.
  - O'Connor 1980, 585, List 227, no. 30.
- **Location:** Uncertain.

1207. East Kennett, Wiltshire (centred on village: SU115675)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **LE:** 12,5cm
- **WI (cutting edge):** 3,5cm
- **WI (socket, inner-outer):** 2,5-3,5cm
- **LE (socket, back-front, inner-outer):** 2,9-3,6cm
- **WE:** just over 300g
- **Description:** Cast copper alloy socketed looped axe with rough surface and dirty-green patina, blunt cutting edge and the clay core still inside the socket.
- **References:**
  - Cunnington and Goddard 1934, 72, no. 310.
  - Annable and Simpson 1964, no. 601.
- **Devizes:** Devizes Museum (D.M. 1135, 310)
- **Plate 101**

1208. Inglesham, Wiltshire (centred on village: SU205985)

- **Copper alloy socketed axe**
- **Type:** Transitional
- **LE:** 10,8cm
- **WI (cutting edge):** 4,8cm
- **WI (socket, inner-outer):** 2,6-3,6cm
- **LE (socket, back-front, inner-outer):** 2,6-3,6cm
- **WE:** 303,91g

- **Description:** Cast copper alloy socketed looped axe with patchy golden/dark brown/black patina speckled with light turquoise and beige flecks. The axe has a square double mouth moulding with a bigger upper mouth moulding and a thinner, hardly recognisable moulding underneath. The rim was not removed and the casting seams are, though fairly thin, still intact. The axe displays clear signs of wear, especially re-sharpening marks. The latter, however, seem to be more recent, as indicated by the attached label.
- **Note:** Since the sharpening marks of the axe are more recent (see label, text below), it is difficult to say whether the axe had been used or sharpened before it was re-discovered in post-medieval or modern times.
- **A small label inside the socket reads:** "Inglesham, Wiltshire Purch. Lechlade 1972. 207985. cleaned and sharpened by finder."
- **References:** Unpublished.
- **London:** British Museum (P1976, 7-1, 12)
- **Plate 100**

1209. Ludgershall, Wiltshire (centred on parish: SU265505)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **LE:** 11,6cm
- **WI (blade):** 4,8cm
- **WI (socket, inner-outer):** 3,1-4,0cm
- **LE (socket, inner-outer):** damaged, about 3,1-4,0cm or more
- **WE:** over 300g
- **Description:** Cast copper alloy socketed looped axe. Its loop and part of the mouth are broken off. The axe has a dented surface with greenish patina. It also has a square double mouth moulding with a thick upper and a thinner lower mouth moulding. The axe is decorated with two dots encircled by two circles just below the lower mouth moulding, and on one of the sides, another dot with two circles half way down the axe's body. Some sections of the blade are still reasonably sharp and the axe looks worn. The ring-and-dot decoration is only visible on one side, because the surface on the other side is very worn and the top section of the upper part (including the mouth mouldings) is missing.
- **References:** Annable and Simpson 1964, no. 611 (the drawing is incorrect).
- **Devizes:** Devizes Museum (D.M. 1984.94)
- **Plae 102**

1210. Pewsey, Martinsell Hill, Wiltshire (SU155580)

- **Copper alloy socketed axe**
- **Type:** Linear-decorated

- **Note:** The site of Martinsell Hill is that of an Early Iron Age settlement; finds from the pits include pottery of All Cannings Cross type and A2 hematite ware, two iron knives, and an iron ring-headed pin.
- **References:**
  - Meyrick 1947, 256.
  - Wiltshire Archaeological Register 1983, 1985, 255.
- **Private Possession** (recorded in Salisbury Museum, DB 929)

1211. Melksham, Wiltshire (centred on town: ST905645)

- **Copper alloy socketed axe**
- **Type:** probably Sompting, Tower Hill variant
- **Description:** Cast copper alloy socketed looped axe. Small crude specimen without defined mouth mouldings, but definite sub-rectangular mouth.
- **References:** Unpublished.
- **Private Possession** (recorded in Salisbury Museum, DB 1973)

1212. Charnage Farm, Mere, Wiltshire (ST834321)

- **Copper alloy socketed axe**
- **Type:** Transitional
- **Description:** Large cast copper alloy socketed looped axe with square mouth moulding, almost parallel sides and a decoration of long, evenly spaced ribs.
- **References:** Moore and Rowlands 1972, 28-9, no. 50.
- **Salisbury:** Salisbury Museum (33/1921)

1213. Temple, Ogbourne St Andrew, Wiltshire (centred on Temple Fm: SU138727)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:** Cunnington and Goddard 1934, 72, pl. XXI, 2.
- **Unknown:** Possibly Salisbury (Brooke Collection)

1214. Rockley, Ogbourne St Andrew, Wiltshire (centred on village: SU165715)

- **Copper alloy socketed axe (lower half)**
- **Type:** Transitional
- **Description:** Large heavy cast copper alloy socketed looped axe; only the lower part of the body and blade survive. The sides are almost parallel, the blade is not much splayed and the faces were decorated with five long, evenly spaced ribs.
- **References: ‘**Notes’ 1969 (Wiltshire Archaeological Magazine), 114-115.
- **Location:** Unknown.

1215. near Salisbury, Wiltshire (centred on Downton: SU185215)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant

- **LE:** 12,5cm
- **WI (cutting edge):** 5cm
- **WI (socket, inner-outer):** 3,2-3,7cm
- **LE (socket, back-front, inner-outer):** 3,2-3,9cm
- **WE:** 345g
- **Description:** Cast copper alloy socketed looped axe with extremely scratched surface and dull golden/brownish patina. The axe has a sub-rectangular double mouth moulding with a thick upper mouth moulding and a very thin, almost invisible lower mouth moulding underneath. The loop is splayed and the axe is decorated with five ribs (ca. 5,9cm in length) terminating in pellets on each face; three ribs are on the face and the two outer ribs are aligned with the edges of the faces. While the upper part of the axe, especially between the ribs, is very scratched, almost obstructing the crudely executed decoration, the lower part is very smooth and shiny. The axe was almost certainly used and re-sharpened in antiquity as well as in more recent times.
- **Note:** Moore and Rowlands (1972) published an axe, also from 'near Salisbury' (no. 52), which looks very similar to this specimen, but the drawings in their catalogue is too small to be certain that it is the same one.
- **Note:** from (apparently) near Salisbury – there are two labels inside the socket; one saying it was from 'near Salisbury', the other one saying it was from 'near Downton' (?)
- **References:** Unpublished.
- **Salisbury:** Salisbury Museum (SM E.T.S. 10 nr Salisbury, 1996R575)
- **Plate 102**

1216. Shalbourne, Wiltshire (centred on village: SU315635)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **LE:** 12,4cm
- **WI (cutting edge):** 3,3cm
- **WI (socket, inner-outer):** 2,0-2,6cm
- **LE (socket, back-front, inner-outer):** 3,2-4,1cm
- **WE:** just over 300g
- **Description:** Cast copper alloy socketed looped axe with rough coppery surface (probably from treatment for bronze disease?). The loop is very thin and it is in as-cast condition.
- **References:** Unpublished
- **Devizes** Devizes Museum (D.M. 1985.50)
- **Plate 101**

1217. Broad Street, Swindon, Wiltshire (centred on Broad St: SU156851)

- **Copper alloy socketed axe**
- **Type:** Transitional

- **LE:** 10cm
- **WI (blade):** 4.6cm
- **WI (socket, inner-outer):** 2.8-3.5cm
- **LE (socket, back-front, inner-outer):** 2.7-3.4cm
- **WE:** 236g
- **Description:** Cast copper alloy socketed looped axe with much corroded and heavily damaged surface. It was probably decorated with three long ribs terminating in pellets.
- **References:** Unpublished.
- **Oxford:** Ashmolean Museum (1955.141)

1218. Teffont Evias, Wiltshire (centred on village: ST985315)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant (?)
- **Description:** Plain cast copper alloy socketed looped axe with sub-rectangular double mouth moulding and slightly diverging sides. The blade was nicked and the axe is blunt. The casting seams remain untrimmed. The faces are undecorated but have slight facets.
- **References:** Unpublished.
- **Private Possession** (recorded in Salisbury Museum, ID 1982)

1219. Urchfont, Wiltshire (centred on village: SU045575)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant (small)
- **Note:**
  - This axe is very similar to the find from Llanmaes, Glamorgan (no. 1405)
  - Cunnigton and Goddard write about it: “Bronze Celt, socketed and looped; obtained about 1883 by the late Mr J.T.Compton, of Urchfont, father of the donor, from flint diggers on the down above the place. Presented by Rev. D.G. Compton, 1910.”
- **References:** Cunnington and Goddard 1934, 66, pl. XIX, no. 7.
- **Salisbury:** Salisbury Museum (could not be located at time of visit)

Worcestershire:

Hoards: none

Single finds:

1220. Gas Works, Lower Moor, Worcester, Worcestershire (centred on Lower Moor: SO985475)

- **Copper alloy socketed axe**
- **Type:** Transitional
- **LE:** 9.5cm

- **WI (blade):** 6.0cm
- **WI (socket, inner-outer):** 2.6-3.6cm
- **LE (socket, back-front, inner-outer):** 2.9-3.8cm
- **WE:** 310g
- **Description:** Cast copper alloy socketed looped axe with shiny, almost black surface finish It has a hardly recognisable lower mouth moulding and slightly splayed loop. The cutting edge, however, is widely splayed and shows signs of wear and re-sharpening. The faces are decorated with four longs ribs (4.9cm in length) terminating in pellets.
- **References:** Smith 1957, 19.
- **Oxford:** Ashmolean Museum (1927.2663)
- **Plate 102**

Yorkshire:

Hoards: none

Single finds:

1221. Broughton, near Malton, N.R. Yorkshire (centred on village: SE765735)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **LE:** 11,4cm
- **WI (cutting edge):** 5,1cm
- **WI (socket, inner-outer):** 2,85-3,8cm
- **LE (socket, back-front, inner-outer):** 3,3-4,4cm
- **WE:** 332,05g
- **Description:** Cast copper alloy socketed looped axe with smooth surface and a patina of dark brown/red, almost black, colour. Where the surface has flaked off, an underlying turquoise layer is shining through – and below that, as some of the scratches in the surface are quite deep, the golden bronze of the original colour is visible. The axe has a sub-rectangular double mouth moulding with a large upper and thinner lower mouth moulding. Below the mouth mouldings are two additional horizontal mouldings which are as thin as the lower mouth moulding. The decoration on the faces is somewhat faded: Four ribs (ca. 4cm in length, terminating in pellets) on each face are suspended from the horizontal rib-like mouth mouldings. On one of the faces they are unevenly spaced and carried out in a crude way, while on the other the ribs are finer and the pellets round and smooth. Also, on the latter, there is a space between the two central ribs and there is a very faint circlet-and-pellet in the same row as the four pellets – but not suspended from a rib. However, there may have been a rib – it has just faded away.

- **Note:** The faded, perhaps underlying decoration we find on this axe may have originated from a former decoration carved into the mould which was used for casting this axe (the same was suggested for the axe from Cayton Carr, Yorkshire (no. 1223)). A mould was made from clay – with a help of a wax model which was subsequently lost. This wax model would have carried a certain décor, but it seems feasible to suggest that if the pattern did not come out well in the mould or had to be erased or exchanged for another reason, the decoration could still be altered by flattening and smoothing down the inside of the mould and then, carefully, incise a different decoration.
- **British Museum Register, Greenwell Collection:** "Broughton near Malton, NRY"
- **References:**
  - Evans 1881, 122.
  - Burgess 1971, 267-8.
  - Schmidt and Burgess 1981, no. 1577.
- **London:** British Museum (WG 1998)
- **Plate 103**

1222. Castle Hill, Burton Agnes, E.R. Yorkshire (centred on village: TA105633)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **LE:** 12,4cm
- **WI (blade):** 6,7cm
- **Description:** Large plain cast copper alloy socketed looped axe.
- **Note:** Schmidt and Burgess list two axes from Burton Agnes, one from 'Castle Hill' and another from near 'Turtle Hill' (Schmidt and Burgess 1981, no. 1579). Both axes are lost and only known from museum casts. The drawings from the casts in Schmidt and Burgess' publication are very similar, even though one depicts the axe' obverse and the other the reverse. Thus, it may be possible that there is only one axe from Burton Agnes and not two.
- **References:** Schmidt and Burgess 1981, no. 1602.
- **Hull:** Possibly Hull Museum (lost in 1974); measurements were taken from a cast in Hull Museum (M18, cast).

1223. Cayton Carr, Yorkshire (centred on Cayton Carr: TA054816)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **LE:** 11,3cm
- **WI (cutting edge):** 6,1cm
- **WI (socket, inner-outer):** 3,1-3,8cm
- **LE (socket, back-front, inner-outer):** 3,0-4,2cm
- **WE:** 371,97g

- **Description:** Cast copper alloy socketed looped axe with scratched flaky surface of dark dull brownish-green colour. The axe's mouth is not aligned with the blade and has only one large moulding. The loop's lower end is splayed and ends in acute corners. The axe is decorated with the same pattern on both faces. There are four short horizontal ribs (2,6cm in length) just below the mouth moulding and three fairly evenly spaced vertical ribs (ca. 4,8cm in length) suspended from the lowest of the horizontal ribs. All three ribs terminate in two circlets, one above the other. There is a central pellet in each of the six circlets. The ribs clearly go through the upper circlet and terminate in the pellets which are the centres of the lower circlets. There seem to have been more than these pellet/circlets in the first place. There are two very faint, almost erased circlets above the right two circlets on the axe's reverse and possibly another one above the two circlets of the central rib. The right-hand area of the obverse face is slightly more corroded and it cannot be determined whether there are also "shadows" of circlets. The cutting edge is slightly splayed, still fairly sharp and displays signs of wear. The casting seams have been hammered flat, so that the sides of this axe are smooth to the touch.
- **Note:** The faint decoration of this axe is a strange feature. The "shadows" of those circlets do not look like they were rubbed of in recent times. It seems more likely that, maybe, they were the originally engraved decoration of the mould, but perhaps the incisions were carried out incorrectly and were flawed. Thus, they had to be removed and were succeeded by the ones the axe displays so clearly today.
- **British Museum Register, Greenwell Collection:** "Cayton Carr, E.R.Y."
- **References:**
  - Evans 1881, 125, fig. 138.
  - Burgess 1971, 267.
  - Schmidt and Burgess 1981, no. 1596.
- **London:** British Museum (WG 1997)
- **Plate 103**

1224. Cold Kirby, N.R. Yorkshire (centred on village: SE535845)

- **Copper alloy socketed axe**
- **Type:** Linear-decorated (local copy?)
- **LE:** 8,3cm
- **WI (blade):** 5,5cm
- **WI (socket, inner):** 2,6cm
- **LE (socket, back-front, inner):** 2,6cm
- **Description:** Cast copper alloy socketed looped axe decorated with two curved ribs on either side of the face. The two ribs on each edge terminate in a single, shared pellet.
- **References:** Schmidt and Burgess 1981, no. 1644.

- **Settle:** Settle Museum (no reg. (Lord Collection))

1225. Embsay Station, W.R. Yorkshire (centred on Embsay Station: SE007532)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **Note:** Cast copper alloy socketed looped axe narrow body and widely splayed blade.
- **References:** Schmidt and Burgess 1981, no. 1618
- **Manchester:** Manchester Museum (probably lost)

1226. Gembling, Yorkshire (centred on village: TA109572)

- **Copper alloy socketed axe**
- **Type:** Transitional?
- **LE:** 10,8cm
- **WI (cutting edge):** 5,1cm
- **WI (socket, inner-outer):** 2,55-3,35cm
- **LE (socket, back-front, inner-outer):** 2,6-3,5cm
- **WE:** 232,4g
- **Description:** Cast copper alloy socketed looped axe of with a light olive-green patina speckled with dark green, orange-red and white flecks. The axe has a double mouth moulding with a larger upper and a thinner lower moulding. There is a small hole – a casting flaw – in the upper mouth moulding. However, since the casting seams have been hammered flat and there is clear evidence of wear (re-sharpening marks and nicks in the blade), the axe was most certainly used notwithstanding the flawed mouth moulding. Both faces are undecorated, but they are framed by two grooves (one on either side) which are aligned with the two edges of the faces. The depth of the grooves is enhanced by a rib on either side of the groove.
- **References:**
  - Evans 1881, 127-128.
  - Schmidt and Burgess 1981, no. 1645.
- **London:** British Museum (WG 1999)
- **British Museum Register, Greenwell collection:** “Gembling, E.R.Y.”
- **Plate 104**

1227. Nafferton Road, Driffield, E.R. Yorkshire (centred on Nafferton Rd, Wansford: TA062565)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 11,3cm
- **WI (blade):** 5,5cm
- **Description:** Cast copper alloy socketed looped axe with three long ribs terminating in pellets. The ribs descend from a triple moulding just below the upper mouth moulding.

- **Note:** It is uncertain whether there is a 'Nafferton Rd' (the axe was found in a brickyard on Nafferton Rd). The axe may have simply been found between Driffield and Nafferton which is located to the east of Driffield.
- **References:** Schmidt and Burgess 1981, no. 1607.
- **Hull:** Hull Museum (M24 (lost in 1974))

1228. Hambleton Hill, N.R. Yorkshire (SE148731)

- **Copper alloy socketed axe**
- **Type:** Transitional (linear-facetted)
- **LE:** 9cm
- **WI (blade):** 5.7cm
- **Description:** Cast copper alloy socketed looped axe. The edges of the facets are embellished with ribs ending in pellets.
- **Note:** Schmidt and Burgess consider this axe to be a "Meldreth Axe with Embellished Facets" (1981, 209).
- **References:** Schmidt and Burgess 1981, no. 1257.
- **Location:** Lost

1229. Ingleton Area, W.R. Yorkshire (centred on town: SD695735)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **LE:** 11,7cm
- **WI (blade):** 6,6cm
- **WI (socket, inner-outer):** 2,7-3,0cm
- **Description:** Plain cast copper alloy socketed looped axe.
- **References:** Schmidt and Burgess 1981, no. 1578.
- **Settle:** Settle Museum (no reg.)

1230. Probably near Leeds, Yorkshire (centred on city centre: SE305345)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 11,1cm
- **WI (blade):** 2,5cm
- **WI (socket, inner):** 2,8cm
- **LE (socket, back-front, inner):** 5,6cm
- **Description:** Cast copper alloy socketed looped axe with three ribs terminating in circlets/pellets. They descend from a triple moulding just below the upper mouth moulding.
- **References:**
  - Burgess 1968, 29, fig. 18.6.
  - Schmidt and Burgess 1981, no. 1605
- **York:** Yorkshire Museum (1213/1948)

1231. Middleton-on-the-Wolds, Yorkshire (centred on village: SE945495)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant

- **LE:** 13,1cm
- **WI (blade):** 6,7cm
- **WI (socket, inner):** 2,8cm
- **LE (socket, back-front, inner):** 3cm
- **Description:** Plain cast copper alloy socketed looped axe.
- **References:**
  - Burgess 1968, 29, fig. 18.5
  - Schmidt and Burgess 1981, no. 1603
- **Scunthorpe:** Scunthorpe Museum (Routledge 128)

1232. Givendale, Pocklington, Yorkshire (centred on Great Givendale: SE809538)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant (small?)
- **LE:** 10,5cm
- **WI (cutting edge):** 5,55cm
- **WI (socket, inner-outer):** 2,3-3,05cm
- **LE (socket, back-front, inner-outer):** 2,5-3,4cm
- **WE:** 223,4g
- **Description:** Cast copper alloy socketed looped axe with an elaborate, unique decoration on both faces. The axe has a dull light beige-golden patina with bright golden patches (especially near the cutting edge) and is speckled with black and green flecks. It only has a single mouth moulding which is not aligned with the blade. The cutting edge is broad, splayed and has been sharpened and used. It retains some of it sharpness. The axe bears an elaborate decoration, which is the same on both faces: One thin rib (4,45cm in length) terminates in a circlet (0,5cm in diameter), which is surrounded by another two circlets (1,35cm and 1,9cm in diameter), crossing the rib. In the upper part of the face, on both sides of the rib, are two curved ribs – a decoration reminiscent of the skeuomorphic wing-decoration of Late Bronze Age socketed axes.
- **References:**
  - Evans 1881, 127, fig. 144.
  - Schmidt and Burgess 1981, no. 1597.
- **London:** British Museum (1875, 4-3, 168.)
- **British Museum Register:** “From near Forden’s Farm, Givendale, near Ripon, Yorkshire.”
- **Plate 104**

1233. Rathmell, W.R. Yorkshire (centred on Rathmell: SD805595)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **LE:** 10,8cm
- **WI (blade):** 5,5cm
- **Description:** Cast copper alloy socketed looped axe, undecorated.
- **References:** Schmidt and Burgess 1981, no. 1593.

1234. Riston, E.R. Yorkshire (centred on Long Riston: TA125425)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant (?)
- **Description:** Plain cast copper alloy socketed looped axe. Crudely made.
- **References:** Schmidt and Burgess 1981, no. 1600.
- **Hull:** Cast formerly in Hull Museum (no. reg.)

1235. Rudston, E.R. Yorkshire (centred on village: TA095675)

- **Copper alloy socketed axe**
- **Type:** Transitional
- **LE:** 10,3cm
- **WI (blade):** 5,4cm
- **WI (socket, inner):** 2,3cm
- **LE (socket, front-back, inner):** 2,4cm
- **Description:** Smallish cast copper alloy socketed looped axe with round cross-section and two outwards curving ribs on either side of the face.
- **References:** Schmidt and Burgess 1981, no. 1643.
- **Hull:** Hull Museum (1)

1236. Seamer Carr, Yorkshire (NZ487097)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **LE:** 12,7cm
- **WI (cutting edge):** 5,8cm
- **WI (socket, inner-outer):** 3,1-4,1cm
- **LE (socket, back-front, inner-outer):** 3,2-4,3cm
- **WE:** 399,67g
- **Description:** Cast copper alloy socketed looped axe with muddy dark brown golden patina freckled with some light turquoise and beige flecks. The axe has a sub-rectangular double mouth moulding. The loop is not splayed but somewhat broad. The casting seams were trimmed and hammered flat so that all surfaces, back, front and the sides are fairly smooth to the touch. The axe's faces are decorated with three long ribs (ca. 5,8cm in length) terminating in encircled pellets. There also ribs on the edges of the faces. They are longer than the other ribs and almost reach the corners of the cutting edge. The axe has not been used and the cutting edge is not sharp - although a re-sharpening attempt was made, maybe even in more recent times: there are evenly spaced scratch marks all over the lowest part of the axe and some have damaged the patina.
- **References:**
  - Evans 1881, 124.
  - Burgess 1971, 267-8.
  - Schmidt and Burgess 1981, no. 1595.

- **London:** British Museum (WG 1994)
- **British Museum Register, Greenwell Collection:** "Seamer Carr, N.R. Yorkshire"
- **Plate 105**

1237. Seamer Carr, Yorkshire (NZ487097)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **LE:** 12,9cm
- **WI (blade):** 7cm
- **WI (socket, inner):** 2,5cm
- **LE (socket, back-front, inner):** 2,9cm
- **Description:** Plain cast copper alloy socketed looped axe.
- **References:** Schmidt and Burgess 1981, no. 1594.
- **London:** British Museum (WG 1987)

1238. Settle Area (?), W.R. Yorkshire (centred on town: SD815635)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:** Schmidt and Burgess 1981, no. 1654.
- **Settle:** Settle Museum (no reg.)

1239. Skipsea, E.R. Yorkshire (centred on village: TA165555)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 11,6cm
- **WI (blade):** 5,5cm
- **WI (socket, inner):** 2,8cm
- **LE (socket, back-front, inner):** 2,9cm
- **Description:** Cast copper alloy socketed looped axe decorated on each face with three ribs terminating in a pellet and circlet. Between the ribs are numerous thin diagonal incisions that make up two rows or 'herring bone' ornament.
- **References:** Schmidt and Burgess 1981, no. 1624.
- **York:** Yorkshire Museum (1139/1948.)

1240. Wybourn Estate, Sheffield, W.R. Yorkshire (centred on Wybourn Estate: SK372869)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 11,6cm
- **WI (blade):** 4,6cm
- **WI (socket, inner):** 3cm
- **LE (socket, back-front, inner):** 3,1cm
- **WE:** 362g
- **Description:** Cast copper alloy socketed looped axe decorated with five long ribs terminating in small pellets on each face.
- **References:** Schmidt and Burgess 1981, no. 1606.

- **Sheffield:** Sheffield Museum (J.1937.6)

1241. Topcliffe, N.R. Yorkshire (centred on village: SE405765)

- **Copper alloy socketed axe**
- **Type:** Armorican, variant Couville, or a small Sompting, variant Tower Hill
- **LE:** 7,0cm
- **WI (cutting edge):** 3,7cm
- **WI (socket, inner-outer):** 1,7-2,1cm
- **LE (socket, back-front, inner-outer):** 1,4-2,1cm
- **WE:** 64,86g
- **Description:** Very small cast copper alloy socketed looped axe with rusty brownish patina and a casting flaw (hole) just below the mouth moulding. The axe has a single thick square mouth moulding. The axe was thinly cast, the mouth moulding being the thickest part of it. An attempt was made to sharpen the axe: the surface is much smoother were is has been in contact with the whetstone. However, although the cutting edge is slightly splayed, this seems to have been a feature of the mould and not something added after the casting process. The axe does not display other signs of wear.
- **Note:** This axe is reminiscent of the small Armorican axes which occur singly and as part of hoards in Northern France, Belgium and occasionally in Britain. However, this axe is also similar to the undecorated, small Tower Hill variant of the Sompting Type – especially when compared to the small axes of the hoard from Hoogstraten, Belgium (MRAH, Bruxelles). Another indicator for this is the mouth moulding: small Armorican axes almost always have a back-to-front mouth moulding, while this small axe's mouth is square.
- **References:** Schmidt and Burgess 1981, no. 1653.
- **London:** British Museum (WG 2002)
- **British Museum Register, Greenwell Collection:** "Topcliffe, N.R.Y."
- **Plate 105**

1242. Near Welburn, N.R. Yorkshire (centred on Welburn: SE685845)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant (?)
- **LE:** 10,7cm
- **WI (blade):** 6,5cm
- **WI (socket, inner):** 2,6cm
- **LE (blade, back-front, inner):** 3cm
- **Description:** Plain cast copper alloy socketed looped axe with widely splayed cutting edge.
- **References:** Schmidt and Burgess 1981, no. 1601
- **Driffield:** Driffield Museum (GC24)

1243. Yeadon, Westfield Lane, Yorkshire (centred on Westfield, Yeadon: SE195406)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant (?)
- **Description:** Cast copper alloy socketed looped axe with a single mouth moulding. It is decorated with one pellet in two roundels in the upper part of each face. Two long and one central short rib descend from the outer roundel.
- **References:** Manby 1986, 93, fig. 15.
- **Bradford:** Bradford Museum (A75:3)

Scotland

Aberdeenshire

Single finds:

1244. 'Aberdeenshire' (centred on county: NJ521167)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant?
- **Description:** Cast copper alloy socketed looped axe with thick upper and thinner lower mouth moulding. Casting flashes removed. Axe looks worked and resharpened. The face shown in the drawing is decorated with three vertical lines of herring bone ornament.
- **Note:**
  - Only known from a drawing; axe lost.
  - First published by Sir Robert Sibbalt in 1710 and reproduced by Stuart Piggott in 1989 (fig.1)
- **References:**
  - O'Connor 2007, 74-9.
  - Piggott, S. 1989, fig. 1.
- **Lost.**

Angus:

Single finds:

1245. Craichie (Criche), Dunnichen, Angus (centred on Craichie: NO505475)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **LE:** 12,4cm
- **WI (cutting edge):** 6,8cm
- **WI (socket, inner-outer):** 2,95-3,7cm
- **LE (socket, back-front, inner-outer):** 3,0-4,0cm

- **WE:** 307,04g
- **Description:** Cast copper alloy socketed looped axe of dull brown-olive/green colour. The axe has a large single square mouth moulding with two smaller, rib-like mouldings underneath. The loop is spurred. The axe is decorated, but the decoration is faded, though still recognisable: It is a combination of five ribs and three circlets, in which one circlet is suspended from a central rib and the others two from four ribs forming two "hanging triangles" (on either side of the central rib and of the same length as the central rib) (LE (central rib): 6,7cm, LE (triangle): 6,8cm, LE (of triangle-ribs) 7,0cm). Also, all three circlets were probably decorated with a central pellet. The cutting edge is splayed, of semi-circular form and shows definitive signs of wear. Rough, overlaying re-sharpening marks suggest that, apart from having been used and re-sharpened in antiquity, the axe was also sharpened in more recent times.
- **Note:** This axe was very probably made in the same mould or made from the same mould template as some of the axes from the Ulverston and Skelmore Heads Hoards (Cumbria, nos. 193, 1395+1396: Plates 106,146+147).
- **Note:** Label found inside the socket: "Found on the farm of Criche – parish of Dunnichen, County of Forfar." The name of the finder is difficult to read: "John McFr(?)adyean(?), 27 Ave(?) St Venys(?)…eriss (?)".
- **References:**
  - Coles 1962, 67 (Angus, no. 9).
  - Schmidt and Burgess 1981, no. 1585
- **London:** British Museum (1891, 4-18, 3)
- **British Museum Register:** "Presented by A.W. Franks, Esq / found in the farm of Criche, parish of Dunnichen, Forfarshire [crossed out, replaced with Angus]".
- **Plate 106**

<u>Argyllshire:</u>

Hoards: none

Single finds:

1246. Loch Ard Achadh (Arachaid), Islay, Argyllshire (NR31084294)

- **Copper alloy socketed axe**
- **Type:** Transitional
- **LE:** 7,0cm
- **WI (cutting edge):** 4,3cm
- **WI (socket, inner-outer):** 2,0-2,7cm
- **LE (socket, back-front, inner-outer):** 1,6-2,2cm
- **WE:** 91,7g

- **Description:** Cast copper alloy socketed looped axe of linear-facetted type. Fairly small specimen with oval mouth and double mouth-moulding: both mouth mouldings are the same size and there is no gap but a groove between them. The axe has an ochre-brownish black patina and the cutting edge is fairly sharp although there are no traces of usage and re-sharpening. The loop is a bit too large for an axe this size and there is a casting flaw just below it.
- **Note:** Schmidt and Burgess describe this axe as 'Meldreth Axe with Embellished Facets" (1981, 207).
- **References:** Schmidt and Burgess 1981, no. 1259.
- **Edinburgh:** National Museum of Antiquities of Scotland (X.DE97)
- **Plate 107**

1247. Crosshill, Kintyre, Argyllshire (centred on Crosshill Loch: NR715194)

- **Copper alloy socketed axe**
- **Type:** Uncertain
- **LE:** 10,1cm
- **WI (blade):** 4,9cm
- **WI (socket, inner):** 2,5cm
- **LE (socket, back-front, inner):** 2,6cm
- **Note:** Schmidt and Burgess list it as 'Sompting Type'.
- **References:** Schmidt and Burgess 1981, no. 1614A
- **Campelltown:** Campbelltown (no reg.)

1248. Loch Glashan (Loch Glen), Lochgair, Argyllshire (centred between Loch Glashan and Lochgair: NR915919)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **LE:** 12,5cm
- **WI (cutting edge):** 7,2cm
- **WI (socket, inner-outer):** 3,1-3,8cm
- **LE (socket, back-front, inner-outer):** 3,3-4,3cm
- **WE:** 411g
- **Description:** Cast copper alloy socketed looped axe with light olive green/ light red/orange patina. One face shows traces of ferrous corrosion (probably from an iron object that lay close the axe). Each face is decorated with two ribs terminating in circlets, a pattern similar to that of socketed axe no. 1338. Fragments of the wooden haft of the handle left in the socket. The axe seems fairly sharp, but there is no obvious evidence for usage and re-sharpening.
- **References:**
  - Coles 1962, 67 (Argyll, no. 22)
  - Schmidt and Burgess 1981, no. 1576.
- **Edinburgh:** National Museum of Antiquities of Scotland (X.DE128)

- **Plate 107**

1249. North Knapdale, Argyllshire (centred on Clachbreck, North Knapdale: NR774765)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **Description:** Plain socketed axe with single mouth moulding and diverging sides, forming a widely-splayed cutting edge.
- **References:** Malcolm 1877, 196.
- **Private Possession.**

1250. Poltalloch, Argyllshire (centred on village: NR815965)

- **Copper alloy socketed axe**
- **Type:** Uncertain (according to Schmidt and Burgess this is a 'small Sompting' axe, but unfortunately, they do not supply an image)
- **LE:** 8,2cm
- **WI (blade):** 2,1cm
- **WI (socket, inner):** 2,1cm
- **LE (socket, back-front):** 4,9cm
- **Note:** Axe could not be located in the National Museum of Antiquities of Scotland (Edinburgh) at the time of visit.
- **References:** Schmidt and Burgess 1981, no. 1614B
- **Edinburgh:** National Museum of Antiquities of Scotland (HPO 16)

Add.: 1403. Rahoy, Morvern, Argyll (NM675445 estimate) –

- **Small vitrified fort**
- **Type:** Iron socketed axe
- **Description:** The site was excavated in 1937, but the finds (among them saddle querns, conical iron ferrule, a fragmentary La Tène 1c brooch and an early iron socketed axe) are not securely stratified.
- **LE:** 17,2cm
- **WI (cutting edge):** ca. 6,5cm
- **WI (socket, inner-outer):** ca. 4,5-5,7cm
- **LE (socket, back-front, outer):** ca. 6cm
- **WE:** 758g
- **Description:** Massive, heavy iron socketed axe. Very corroded and with black patina, but loop still intact. The socket is broken, but otherwise the axe is complete. Unlike copper alloy axes, this iron axe's shape is not symmetrical: the cutting edge is slightly curved downwards. No usage or re-sharpening marks visible. The loop was forged separately and then attached.
- **References:** Manning and Saunders 1972, 285.
- **Edinburgh:** National Museums of Scotland: NMA (X.HH.421)
- **Plate 149**

Ayrshire:

Hoards: none

Single finds:

1251. Ardrossan, Ayrshire (centred on town: NS235425)

- **Mica schist mould for socketed axes**
- **Type:** Sompting
- **Note:** Two halves of a mica schist mould for cast copper alloy socketed looped axes with rib-and-pellet decoration.
- **NB:** It is likely that these moulds were found in association with the mould from Rosskeen,(no. 1280) but this suggestion needs further investigation (pers. comm. Trevor Cowie, 14.3.2014)
- **References:**
  - Scott 1961, 49.
  - Morrison 1978.
- **References:**
  - Scott, J.G. 1961. Regional Archaeologies. South West Scotland. London, p. 49.
  - Morrison, G. 1978. 'The Bronze Age in Ayrshire'. Ayrshire Collections, vol. 12, No 4, Ayrshire Archaeology and Nat. Hist. Soc.
- **Oxford:** Ashmolean Museum (1927 / 2725)
- **Note:** The mould had been removed from the display for re-decoration of the room and was unfortunately inaccessible at the time of the visit.
- **Plate 108**

Berwickshire:

Hoards: none

Single finds:

1252. Corsbie Tower, Legerwood, Berwickshire (centred on Corsbie Tower: NT60754383)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant (small?)
- **LE:** 9,4cm
- **WI (cutting edge):** 7,2cm
- **WI (socket, inner-outer):** 2,9-3,8cm
- **WI (socket, back-front, inner-outer):** 2,8-3,8cm
- **WE:** 297g
- **Description:** Cast copper alloy socketed looped axe with square socket and indistinct double-mouth moulding. The cutting edge is splayed and it is extremely sharp. However, it

likely that these traces of wear are modern. It is decorated, but the decoration has been worn away through re-sharpening and/or polishing of the surface (hence the bright golden colour). It used to have three ribs on both faces, the two outer ones probably terminating in pellets, the central one terminating in a circlet. Another circlet was at the top of the central rib and there may have been another one in the middle of the central rib, but now only 'shadows' of the decoration are left: the polishing has removed any tangible evidence of the rib-and-pellet decoration.

- **References:**
  - Coles 1962, 68 (Berwickshire, no. 1)
  - Schmidt and Burgess 1981, no. 1589.
- **Edinburgh:** National Museum of Antiquities of Scotland (X.DE 81)
- **Plate 109**

Bute:

Hoards: none

Single finds:

1253. Little Dunagoil, Bute (centred on Little Dunagoil fort: NS0870753332)

- **Iron Age fort/settlement site**
- **Type:** Clay mould for socketed axes of Sompting type, Tower Hill or Kingston variant
- **Description:** Two fragments of a mould for the casting of cast copper alloy socketed axes with rib-and-pellet decoration.
- **Note:** The two fragments do not belong to the same mould.
- **Small fragment:**
  - **LE:** 7,0cm
  - **HE:** 3,1cm
  - **WI:** 2,2cm
  - **WE:** 39g
  - **Description:** Clay mould fragment from settlement at Little Dunagoil. This is very probably a fragment of a mould for the casting of a bronze axe, probably a socketed axe, but this is not certain as the mould fragment comes from the lower part of the mould and shows the impression of the lower part of the cutting edge/blade rather than the butt end/socket. The clay is orange-rosy-skin-coloured on the outside and light grey inside.
- **Large fragment:**
  - **LE:** 7,8cm
  - **HE:** 8,0cm

- **WI:** 3-4cm
- **WE:** 165g
- **Description:** Clay mould fragment from the settlement at Little Dunagoil. It is the lower part of half a clay mould for a socketed, rib-and-pellet decorated axe. The cutting edge would have been 6,8cm in length and it would have been fairly splayed even before reworking/shaping of the blade. The face of the axe would have been ca 1,8cm in width and the sides at least 2,5cm in depth. The negative shape in the mould suggests that the finished product had a narrow, sub-rectangular socket and a single mouth moulding. The remaining length of the matrix is 6,8cm and the specimen would have been quite small (compared to the corpus of rib-and-pellet axes). The axe would have been decorated with three ribs terminating in pellets on this (and presumably on the other) face. The remaining ribs are 4,2cm, 3,8cm and 3,8cm in length and the gaps between them and the edges are ca. 3-5mm in length. The ribs terminate in very small pellets. The remaining surface of the mould is flat except for a hollow indentation close to the edge, possibly for securing this half of the mould to the other (now missing) half.

- **References:**
  - Schmidt and Burgess 1981, no. 1642.
  - Dunning 1934, Appendix II.
- **Rothesay:** Bute County Museum (A.29BCM: LD.A.LV (small fragment) and LI (big fragment) (15))
- **Plate 110**

<u>Clackmannanshire:</u>

Hoards:

1254. +1255. Ochil Hills, near Tillicoultry, Stirling, Clackmannanshire (NS92549705)

- **Axe Hoard**
- **Type:** Sompting, Kingston variant
- **Description:** Possibly a small hoard of two cast copper alloy socketed looped axes.
- **Note:** Ramsay gives a detailed account of where they were found and a rough description of the axes: “Two socketed celts in remarkably fine preservation, they were found on his [Mr. Ramsay’s] property at Tillycoultry, a village situated at the foot of the Ochil Hills, about ten miles from Stirling. They lay at about the depth of ten feet, one of them embedded in moss, but in a sandy soil; the other, a specimen with very highly-

polished patina, in a bed of green sand, which possibly had been the cause of its perfect condition. It is a type usually occurring in the southern part of England, at Kingston, in the bed of the Thames, &c. The sides are ornamented with raised lines, and circles, in similar matter as the celt figured in this Journal [Archaeological Journal], vol. iv, p. 328, fig. 8 [see remark below] but in different arrangement…." (Ramsay 1856, 412). The socketed axe Ramsay suggests as a parallel for the Tillicoultry find is unprovenanced.

- **Addendum:** Found in a sandpit at Tillicoultry in close association, but not together. The find spot is very close to the site of a stone circle and the site also produced several Early Bronze Age urns. O'Connor suggests that "…the significance of this is that at least one, and probably both, of our axes were found close to, or even within, the Cuninghar stone circle and this would be another example of Late Bronze Age activity on such monuments in Scotland." (O'Connor 2007, 76)
- **References:**
  - Note: Proceedings of the Society of Antiquities of Scotland, Vol. 4, 1861-62, 382.
  - Ramsay 1856, 412.
  - Coles 1962, 68 (Clackmannanshire, no. 2).
  - O'Connor 2007, 74-9.
- **Location:** Unknown.

Single finds: none

<u>Dumfrieshire</u>

Hoards: none

Single finds:

1256. Annan, Dumfriesshire (centred on town: NY195665)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant (?)
- **LE:** 11,3cm
- **WI (blade):** 6,4cm
- **WI (socket, inner):** 2.9cm
- **LE (socket, back-front, inner):** 3cm
- **WE:** 340cm
- **Description:** One thin-ribbed hanging triangle on each face.
- **References:**
  - Coles 1962, 68 (Dumfriesshire, no. 1)
  - Coles 1965, 96.
  - Schmidt and Burgess 1981, no. 1590.
- **Dumfries:** Dumfries Museum (1935.53)

1257. Auchencairn Hill, Closeburn, Dumfriesshire (centred on Auchencairn Hill: NX934905)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant (?)
- **Description:** Cast copper alloy socketed looped axe with thick upper mouth moulding and a thinner rib-like mouth moulding underneath. The sides diverge, forming a widely splayed cutting edge. The faces of the axe are decorated with two pairs of plain ribs each. The ribs are close to the edges of the face.
- **Note:** Coles only published a one-sided drawing of this axe, which makes it difficult to classify it.
- **References:** Coles 1965, 96, fig. 10, 9.
- **Thornhill:** Thornhill Museum (6)

Highland

Hoards: none

Single finds:

1258. Newtonmore, Inverness, Highland (centred on town: NN715995)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:** Schmidt and Burgess 1981, no. 1655A.
- **Private Possession.**

Lanarkshire

Hoards: none

Single finds:

1259. Coulter, Lanarkshire (centred on village: NT025335)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant (small?)
- **Description:** Small specimen with one thin-ribbed hanging triangle on each face. The tip of the triangle is decorated with a pellet.
- **LE:** 8,7cm
- **WI (blade):** 5,5cm
- **WI (socket, inner-outer):** 2,2-3,1cm
- **LE (socket, back-front, inner-outer):** 2,1-2,9cm
- **WE: /**
- **References:**
  - Coles 1962, 70 (Lanarkshire, no. 8)

        - Schmidt and Burgess 1981, no. 1591.
    - **Edinburgh:** National Museum of Antiquities of Scotland (X.1894-409)
    - **Plate 111**

1260. near Glasgow, Lanarkshire (not mapped)
- **Copper alloy socketed axe**
- **Type:** Unknown
- **Note:** This is one of Coles' decorated axes and it is very probable that it is a transitional or Early Iron Age axe. However, the exact type cannot be determined.
- **References:** Coles 1962, 70 (Lanarkshire, no. 15)
- **Glasgow:** Kelvingrove (02-73kx)

1261. Holytown, Lanarkshire (centred on parish: NS765605)
- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant (?)
- **LE:** 12,6cm
- **WI (blade):** 6,1cm
- **WI (socket, inner):** 2,7cm
- **LE (socket, back-to-front, inner):** 3cm
- **WE:** 400g
- **Description:** Elaborately decorated cast copper alloy socketed looped axe with one triple-ribbed circlet just below the mouth moulding and two further triple-ribbed circlets half way down the body of the axe; the upper and lower circlets are connected by three long ribs on each side.
- **References:**
    - Coles 1962, 70 (Lanarkshire, no. 3)
    - Schmidt and Burgess 1981, no. 1583.
- **Glasgow:** Hunterian Museum (B.1951.2124)

1262. Lesmahagow, Lanarkshire (centred on town: NS815395)
- **Copper alloy socketed axe**
- **Type:** Unknown
- **Note:** This is one of Coles' decorated axes and it is very probable that it is a transitional or Early Iron Age axe. However, the exact type cannot be determined.
- **References:** Coles 1962, 70 (Lanarkshire, no. 10)
- **Glasgow:** Kelvingrove, Palace of History 1911, exhibit no. 857.

1263. Bishop Loch, Old Monkland, Lanarkshire (centred on Bishop Loch: NS68766681)
- **Settlement/crannog site**
- **Type:** Earliest iron axe (unlooped)
- **Note:** From a probable crannog site at the end of Bishop Loch.
- **References:** Manning and Saunders 1972, 229-30.
- **Probably lost.**

1264. 'Lanarkshire' (not mapped)

- **Copper alloy socketed axe**
- **Type:** Unknown
- **Note:** This is one of Coles' decorated axes and it is very probable that it is a transitional or Early Iron Age axe. However, the exact type cannot be determined.
- **Location:** Possibly Wiston and Roberton parish, NS93 (http://www.scotlandsplaces.gov.uk/search_item/index.php?service=RCAHMS&id=97327)
- **References:** Coles 1962, 70 (Lanarkshire, no. 7)
- **Ranken Collection.**

Midlothian

Hoards: none

Single finds:

1265. Falcon Ave., Edinburgh, Midlothian (centred on Falcon Ave: NT247715)

- **Copper alloy socketed axe**
- **Type:** Transitional
- **LE:** 8,1cm
- **WI (cutting edge):** 4,4cm
- **WI (socket, inner-outer):** 2,3-3,1cm
- **LE (socket, back-front, inner-outer):** 2,2-2,8cm
- **WE:** 140g
- **Description:** Cast copper alloy socketed looped axe of dark green colour. The cutting edge is not very splayed and blunt, but there are a few re-sharpening marks visible. The axe possesses only one mouth moulding, which is not particularly thick. Another, lower, mouth moulding is only visible on the faces, but not on the sides. The axe bears a decoration of two ribs terminating in pellets, which are unevenly spaced: There is a gap of over a centimetre between the ribs, but only about 3mm between the ribs and the faces' edges.
- **References:**
  - Coles 1962, 70 (Midlothian, no. 14)
  - Schmidt and Burgess 1981, no. 1627.
- **Edinburgh:** National Museum of Antiquities of Scotland (X.DE121)
- **Plate 112**

1266. Fala, Midlothian (centred on village: NT435615)

- **Copper alloy socketed axe**
- **Type:** Unknown

- **Note:** This is one of Coles' decorated axes, and it is very probably a transitional or Early Iron Age find. However, the type could not be determined.
- **References:** Coles 1962, 70 (Midlothian, no. 13)
- **Location uncertain.**

Add: 1404. Traprain Law, Midlothian (NT580747)

- **Late Bronze Age/Early Iron Age transitional settlement**
- **Description:** Pottery, tools made from organic material and a rich assemblage of metalwork: socketed axes (and fragments of socketed axes) of Late Bronze Age South Welsh and Meldreth types as well as one iron socketed axe, tanged chisel, socketed gouge, sword(?) blade fragments, awls and other small tools (e.g. punches), fragment of a bronze Covesea type bracelet, swan's neck and nail-headed pins, mould fragments for socketed axes and swords of Ewart Park type, numerous metal fragments, runners and bronze waste.
- **Notes:** Unfortunately little weight can be placed on the stratigraphy of any of the objects from this site as the method of excavation was by a series of arbitrary levels. (Manning and Saunders 1972, 286).
- **1404. Socketed iron axe**
  - **LE:** 12,9cm
  - **WI (cutting edge):** 6,2cm
  - **WI (socket, inner-outer):** 4,6-5,9cm
  - **LE (socket, back-front, inner-outer):** 3,8-4,8cm
  - **WE:** 523,7g
  - **Description:** Very heavy iron socketed axe with very flaky surface. It has a dark-grey/black patina and it is shaped like a copper alloy axe. The loop was not forged separately. It has a single large mouth moulding.
  - **Notes:** Found during the excavations in the lowest level of the site close to the fragmentary remains of a hut associated with Late Bronze Age bronzes and probably a Hallstatt razor.
  - **Museum Accession Number: X.GVM473**
- **References:**
  - Curle 1915, 139-303.
  - Curle 1920, 54-124.
  - Curle and Cree 1921, 153-207.
  - Cree 1923-24, 241-286.
  - Burley 1955-6, 150, fig. 1, T27.
  - Manning and Saunders 1972, 286.
  - Rainbow 1928, no. 9.
- **Edinburgh:** National Museum of Antiquities: NMA: X.GVM473

Morayshire

Hoards: none

Single finds:

1267. Culbin Sands, Morayshire (centred on Culbin Sands: NH902576)

- **Iron socketed axe**
- **Type:** Earliest iron axe
- **LE:** 10,4cm
- **WI (cutting edge):** ca. 5,3cm
- **WI (socket, inner-outer):** ca. 4,1-5,0cm
- **LE: (socket, back-front, inner-outer):** 3,3-3,9cm
- **WE:** 194g
- **Description:** Iron socketed axe with much corroded surface. Large parts of the surface have flaked off, but a slight upper mouth moulding and the way in which the loop was forged are still clearly visible: the loop was not made separately and then attached; instead, the mouth of the axe was perforated in two places and a strip of iron 'pulled out', so that the axe does not really have separate a 'loop', but a loop made from part of the body of the axe.
- **Note:** Found in unknown circumstances. Very badly corroded.
- **References:**
  - Rainbow 1928, no. 10.
  - Manning and Saunders 1972, 286.
- **Edinburgh:** National Museum of Antiquities of Scotland (X.BI.29.343)
- **Plate 112**

Peeblesshire

Hoards:

1268. -1270. Lamancha, Newlands, Peebleshire (centred on village: NT199522)

- **Axe hoard**
- **Type:** Armorican
- **Description:** 3 socketed copper alloy axes.
- **References:**
  - Coles 1962, 52-3.
  - Schmidt and Burgess 1981, nos. 1648-1650.
- **Hull:** Hull Museum (no reg.)

Single finds: none

Perthshire

Hoards: none

Single finds:

1271. Cronan, Strathmore District, Perthshire (NO247435)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **LE:** 13,2cm
- **WI (cutting edge):** 7,1cm
- **WI (socket, inner-outer):** 2,9-3,7cm
- **WI (socket, back-front, inner-outer):** 2,7-3,7cm
- **WE:** 330g
- **Description:** Plain cast copper alloy socketed looped axe with two casting flaws (holes), one just below the loop and another on the opposite side. The axe looks worn and is of a dark turquoise-black patina. It is no longer sharp, but faint re-sharpening marks are visible. The axe has been hammered with both a blunt and another, sharper, chisel-like tool and has a dent on one face – this could have happened in recent times, though. The socket is 10,1cm deep.
- **References:** Schmidt and Burgess 1981, no. 1588
- **Edinburgh:** National Museum of Antiquities of Scotland (X L.1926.12) / National Museum of Antiquities of Scotland (X.DE135)
- **Plate 113**

1271b. Delvine, Perthshire (NO1339)

- **Copper alloy socketed axe**
- **Type:** Transitional
- **LE:** 10,3cm
- **WI (cutting edge):** 5,4cm
- **WI (socket, inner):** 2,3-2,3cm
- **WE:** 235g
- **Description:** Cast copper alloy socketed looped axe described by Schmidt and Burgess as ‘Meldreth Axe with Embellished Facets’ (1981, 209). The axe has a round mouth moulding and is linear-facetted with six facets. The edges of the facets are decorated with ribs ending in pellets just over half-way down.
- **References:** Schmidt and Burgess 1981, no. 1256.
- **Perth:** Perth Museum (133)

1272. Vale of Menteith, Perthshire (?) (not mapped)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **References:**

        - Coles 1962, 52.
        - Schmidt and Burgess 1981, no. 1652.
    - **Location:** Unknown

1273. 'Perthshire'? (not mapped)

- **Copper alloy socketed axe**
- **Type:** Unknown
- **Note:** This is one of Coles' 'decorated' axes, and it is very likely that it is either a transitional or an Early Iron Age axe; the exact type, however, cannot be determined.
- **References:** Coles 1962, 72 (Perthshire, no. 28)
- **Dunstaffnage Collection.**

Renfrewshire

Hoards: none

Single finds:

1274. Cardonald, Renfrewshire (centred on parish: NS535645)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant (?)
- **LE:** 12,5cm
- **WI (blade):** 6,4cm
- **WI (socket, inner):** 2,6cm
- **LE (socket, back-front, inner):** 2,9cm
- **WE:** 250g?
- **Description:** Two ribs descend from the lower mouth moulding and terminate in a double-ribbed circlet each.
- **References:**
    - Coles 1962, 72 (Renfrewshire, no.1)
    - Schmidt and Burgess 1981, no. 1584.
- **Kirkcudbright:** Kirkcudbright Museum (2390)

Ross and Cromarty

Hoards:

1275. -1279. Poolewe, Gairloch, Ross and Cromarty (NG862805)

- **Mixed Hoard**
- **Type:** Multi-period hoard
- **Description:** The hoard includes one cast copper socketed looped axe axe with rectangular section, heavy mouth moulding and wide blade, a second cast copper alloy socketed axe with rectangular section, heavy mouth moulding and vertical rib decoration terminating in pellets and a short horizontal rib near top of faces, two fragments of two socketed

axes, rectangular section, recurved blade, broken, a hollow ring with rough rectangular hole in side, two rings with T-shaped cross-section and penannular ornament with trumpet terminals and solid rod.

- **1275. Copper alloy socketed axe (1)**
  - **Type:** Sompting, Kingston variant
  - **LE:** 11,2cm
  - **WI (cutting edge):** 5,8cm
  - **LE (socket, inner-outer):** 3,6-4,4cm
  - **WI (socket, inner-outer):** 3,5-4,5cm
  - **WE:** 346,8g
  - **Description:** Cast copper alloy socketed looped axe with indistinct sub-rectangular socket and a single mouth moulding. The loop is splayed, especially at its lower end. There is a hole just under the loop – probably a casting flaw (?). The socket is ca 8,5cm deep. The patina is bright/dark golden. The axe is decorated with three long ribs (ca. 6,15cm in length) terminating in pellets, but the central rib does not start just below the mouth moulding, but from a horizontal rib that connects the two outer ribs. That makes the central rib only 5,3cm long (compare drawing). There are indistinct signs of wear.
  - **Museum Accession Number:** NMS: X.L.1958.7.
  - **Plates 114 and 115**
- **1276. Copper alloy socketed axe (2)**
  - **Type:** Sompting, Tower Hill variant
  - **LE:** 11,1cm
  - **WI (cutting edge):** 6,8cm
  - **LE (socket, inner-outer):** 3,1-4,1cm
  - **WI (socket, inner-outer):** 3,0-4,4cm
  - **WE:** 355,5g
  - **Description:** Plain cast copper alloy socketed looped axe with splayed loop and only one thick mouth moulding. It is partly corroded, especially near the cutting edge, but there are signs of wear.
  - **Museum Accession Number:** NMS: X.L.1958.8.
  - **Plates 114 and 115**
- **1277. Lower half of copper alloy socketed axe (3)**
  - **Type**: Sompting, Tower Hill variant?
  - **LE:** 9,2cm
  - **WI (cutting edge):** 6,3cm
  - **LE (socket, inner-outer):** none
  - **WI (socket, inner-outer):** none
  - **WE:** 167,7g
  - **Description:** Lower part of a cast copper alloy socketed looped axe, which was obviously a faulty casting, because the upper part of the socket is missing, but not broken off: the socket opening at the

top displays no breaks but soft, rounded, slightly bulbous edges, as if there was not enough bronze to fill the mould. The patina is dark golden/brown and it is plain. The blade is triangular rather than splayed.
        - **Museum Accession Number:** NMS: X.L.1958.10.
        - **Plates 114 and 115**
    - **Fragment of wood, probably from one of the axes: (WE)** 6,9g
    - **1278. Blade fragment of copper alloy socketed axe (4)**
        - **Type:** Sompting, Tower Hill or Kingston (?)
        - **Remaining LE:** 3,2-3,4cm
        - **WI (cutting edge):** 6,9cm
        - **WE:** 92,3g
        - **Description:** Lower part of socketed looped axe. Cutting edge is not very splayed. Dark golden patina. No signs of wear.
        - **Museum Accession Number:** NMS: X.L.1958.9
        - **Plates 114 and 115**
    - **1279. Small socketed copper alloy axe (5)**
        - **Type:** uncertain/transitional?
        - **LE:** ca. 5,7cm
        - **WI (cutting edge):** 3,6cm
        - **WE:** 40,7g
        - **Description:** Very small cast copper alloy socketed looped axe with bright dark golden patina. The mouth and half of one of the faces is missing. It has a splayed cutting edge and the metal seems 'porous'.
        - **Museum Accession Number:** NMS: X.L.1958.11
        - **Plates 114 and 115**
    - **Copper alloy ring (one of two)**
        - **Cauldron handle**
        - **Type:** B2(?)
        - **Outer diameter:** 8,2cm
        - **Inner diameter:** 6,5cm
        - **WE:** 53,2g
        - **Description:** Cast copper alloy ring with hour-glass shaped cross-section. The inside is smooth and looks worn. Probably a cauldron handle.
        - **Description:** Two ring handles with T-shaped cross-section of which only one survives (the other was retained by the finder; now untraceable)
        - **References:** Gerloff 2010, 222, no. 61.
        - **Museum Accession Number:** NMS: X.L.1958.13.
        - **Plates 114-115**
    - **Smaller copper alloy ring**
        - **Outer diameter:** 4,6cm
        - **Inner diameter:** 3,1cm
        - **WE:** 29,2g

        - **Description:** Small, almost solid copper alloy ring with two almost square hole opposite each other. There is a casting flaw on the outside, but it seems that it was attempted to repair it – the hole was filled with a small pellet of bronze.
        - **Museum Accession Number:** NMS: X. L.1958.12
        - **Plates 114 and 115**
    - **Copper alloy ornament with trumpet-shaped terminals –**
        - **LE:** 12,1cm
        - **Diameter of cups:** between 5,2-5,5
        - **WE:** 61,3g
        - **Description:** Copper alloy dress-fastener, very worn, especially the trumpet-shaped terminals.
        - **Museum Accession Number:** NMS: X.DO20
        - **Plate 113**
    - **Note:** "A Late Bronze Age bronze hoard, not earlier than the late 8th c BC (J M Coles 1962) was found by Hector McIver in May 1877 during peat-digging on high ground, on the N side of and overlooking the River Ewe some distance beyond the public school at Poolewe (W Jolly 1880). The contents lay together at a depth of 6' and consisted of 5 socketed axes (1 broken and 2 fragmentary), 3 rings and a penannular ornament with trumpet terminals.
      In 1879 most of the hoard was acquired by Sir Kenneth McKenzie of Gairloch, who presented the penannular ornament to the National Museum of Antiquities of Scotland (NMAS) in 1881 (Accession no: DO20). One of the rings was retained by McIver and is now untraceable, but Coles located the remainder of the hoard at Conan House, and it is now on loan to the NMAS (Accession Nos.: L.1958.7-13). The hoard was found in the peat bog centred at NG 862 805 approximately 100.0m E of Creag an Fhitich, the "high ground" mentioned by Jolly (W Jolly 1880), but the exact findspot cannot be ascertained. No similar finds have been made since." (Royal Commission on the Ancient and Historical Monuments of Scotland, ID 11968)
    - **References:**
        - Jolly 1879, 45-49.
        - Coles 1962, 72 (Ross and Cromarty, no. 9-12) and 129.
        - Schmidt and Burgess 1981, nos. 1581, 1582, 1628.
        - Gerloff 2010, 222, no. 61.
    - **Edinburgh:** National Museum of Antiquities of Scotland (X. L1958.7-L1958.13 and DO20 (penannular ornament with cup-shaped ornaments))
    - **Plates 113-115**

Single finds:

1280. Rosskeen, Ross and Cromarty (centred on Stittenham: NH652743)

- **Steatite mould**
- **Type:** Sompting, Tower Hill variant axes
- **Description:** Two halves of a steatite mould for axes decorated with three circlets (one just below the mouth moulding plus two in the centre of the axe's body). The upper circlet is connected with the lower ones through long ribs and on one side (no. 1280a), there is a connecting rib between the two lower circlets.
- **Note:** It has been suggested that these two mould halves were found in association with the mould from Ardrossan (no. 1251), but this suggestion needs further investigation (pers. comm. Trevor Cowie, 14.3.2014)
- **1280a: One half of a steatite mould**
  - **Edinburgh:** National Museum of Antiquities of Scotland (X.C51)
  - **LE:** 10,1-10,6cm
  - **WI:** 4,3-4,4cm
  - **HE:** 15,6cm
  - **WE:** 1521,2g
  - **Description:** One half of a steatite mould for decorated socketed axes, most probably of Sompting type. This mould half is the one with the four holes; the loop of the axe is on the right hand side. The half is complete and not chipped. However, the two circlets on the face of the socketed axe (the end product) would have been connected by a horizontal rib and it cannot be decided whether this line was left on purpose or by accident, because it is missing in the other half.
- **1280b: One half of a steatite mould**
  - **Edinburgh:** National Museum of Antiquities of Scotland (X.C52)
  - **LE:** 10,1-10,5cm
  - **WI:** 4,0-4,6cm
  - **HE:** 15,8cm
  - **WE:** 1250,8g
  - **Description:** One half of a steatite mould for decorated socketed axes of Sompting type. This is the half where the loop of the end product is on the left hand side. The mould is damaged: Part of the lower edge and the centre are missing. Also, the inner part of one of the circlets was broken off.
- **The end product:** The axes that this mould would have produced were axes of Sompting type, Tower Hill variant (e.g. no. 1129 or no. 1150). The decoration would have been two long ribs (5,3cm in length) terminating in circlets.
  - **LE:** 15,0cm

        - **WI (cutting edge):** 8,2cm
        - **WI (socket, outer):** 4,6cm
        - **LE (socket, back-front, outer):** 4,8cm.
        - **Note:** The axes would have had a sub-rectangular socket with a double-mouth moulding consisting of a larger upper and a thinner lower mouth moulding.
    - **References:**
        - Scott 1966, fig. 58.
        - Schmidt and Burgess 1981, nos. 1609-1610.
    - **Edinburgh:** National Museum of Antiquities of Scotland (X.L.1964a&b/CM.51 and 52)
    - **Plate 116**

1263. Gairloch, Ross and Cromarty (centred on town: NG805765)

- **Iron socketed axe**
- **Type:** Earliest iron axe
- **Note:** The axe is lost, but Manning and Saunders quote MacKie), who had discovered a passage in J.H. Dixon's 'Gairloch and Guide to Loch Maree' (1886) in which he said: "An iron axe-head of the shape of the bronze celt figured among our illustrations [the bronze celt in Dixon 1886, 121 is a decorated socketed axe] and with the aperture for the handle similarly in line with the axis instead of at right angles to it, was found in 1885 in the garden at Inveran." [Note by author: The small village of Inveran, however, is located at NH570975, north of Inverness.].
- **References:**
    - MacKie 1967. Discovery and Excavation in Scotland, 47.
    - Manning and Saunders 1972, 286.
- **Location:** Lost.

Stirlingshire

Hoards: none

Single finds:

1282. "Stirlingshire"? (not mapped)

- **Copper alloy socketed axe**
- **Type:** Armorican
- **Note:** Schmidt and Burgess note: "The find-place for this axe is not certain as the Stirling Museum Catalogue does not give a location. The axe however was presented by a donor together with a number of flint arrow-heads expressly from France, which may suggest that the axe also came from there."
- **References:** Schmidt and Burgess 1981, no. 1651.
- **Stirling:** Smith Institute (5941)

Sutherland

Hoards: none

Single finds:

1283. Golspie, Sutherland (centred on town: NC832006)
- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant (?)
- **LE:** 13cm
- **WI (blade):** 5,8cm
- **WI (socket, inner):** 2,6cm
- **LE (socket, front-back, inner):** 2,7cm
- **WE:** 360g
- **Description:** Damaged and very corroded cast copper alloy socketed looped axe decorated with two faint circlets with central pellet.
- **References:** Schmidt and Burgess 1981, no. 1578.
- **Golspie:** Dunrobin Castle Museum (1865.3)

1284. Portskerra, Melvich, Sutherland (centred on town: NC875655)
- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **Description:** Large cast copper alloy socketed looped axe with broken off loop. The faces are narrow, the sides slightly diverging into a narrow cutting edge. The faces are decorated with a five large circlets – two are right under the small mouth moulding and three further down the body of the axe. They are connected by four ribs, forming the letter 'M' with a circlet at each end and each angle.
- **Note:** The axe was reported to the National Museum of Antiquities of Scotland in Edinburgh in 1961.
- **References:** Unpublished, unless Coles 1962, 74 meant this axe when he described the axe from the Sutherland-Caithness Border (see below, no. 1285).
- **Private Possession.**

1285. Sutherland-Caithness Border, Sutherland (not mapped)
- **Copper alloy socketed axe**
- **Type:** Unknown
- **Note:**
  - This is one of Coles' 'decorated' axes, and it is very likely that it is either a transitional or an Early Iron Age axe; the exact type, however, cannot be determined.
  - This might be the axe from Portskerra, described above (no. 1162).
- **References:** Coles 1962, 74 (Sutherland, no. 5)

- **Location:** uncertain, found in 1961

Wigtownshire

Hoards: none

Single finds:

1286. Knock and Maize, Leswalt parish, Wigtownshire (NW998578)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **LE:** 13,4cm
- **WI (blade):** 6,6cm
- **WI (socket, inner):** 2,8cm
- **LE (socket, front-back, inner):** 3,3cm
- **WE:** 500g
- **Description:** Cast copper alloy socketed looped axe with a different decoration on each face: on one face there is a central pellet surrounded by two roundels in the upper part of the axe; five ribs descend from this roundel ornament and terminate in three more pellets surrounded by two circlets. On the other face, it is the same 'one pellet-and-two-roundels' ornament in the centre of the upper part, but only two ribs descend from it and each terminates in another pellet surrounded by two circlets.
- **Note:** Found in a peat-moss near the farmhouse.
- **References:**
  - Evans 1881, 137, fig. 166.
  - Coles 1962, 74 (Wigtownshire, no. 10)
  - Schmidt and Burgess 1981, no. 1586.
- **Stranraer:** Stranraer Museum (1964.14 / Earl of Stair Collection (?))

Wales

Caernarvonshire:

Hoards:

Single finds:

1287. 'Falls of Snowdon'/'Llanberis', Caernarvonshire (centred on waterfall nr Llanberis: SH578591)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant

- **LE:** 12,1cm
- **WI (edge):** 6,2cm
- **WI (socket, inner-outer, remaining):** approx. 2,75-3,75cm
- **LE (socket, inner-outer, back-front, remaining):** approx. 3,1- 3,6cm
- **WE:** 506,7g
- **Description:** Heavily damaged cast copper alloy socketed looped axe with rough surface and dark green/brownish patina. The surface shows many deep cuts and dents, probably recent. The axe is undecorated and has one single thick mouth moulding – and maybe a very slightly, flattish additional moulding underneath. One half of the socket is missing which makes it hard to say whether or not it was of sub-rectangular shape. The axe is wedge-shaped and very similar to the undecorated axe from the Kingston Hoard (Surrey, no. 988). The casting seams have been smoothed down and although the axe seems to have been worked with and shows traces of re-sharpening marks, the cutting edge is not sharp anymore, and in fact, blunt objects and/or other sharp edges have been hit with it and left their marks on the cutting edge. The loop has splayed corners.
- **References:** Savory 1980, no. 200.
- **Cardiff:** National Museum and Galleries of Wales (68.289/3)
- **Plates 117**

<u>Denbighshire:</u>

Hoards:

1288. +1289. Plas-yn-cefn, Denbighshire (centred on village: SJ019711)

- **Axe hoard**
- **Type:** Transitional
- **Description:** Two cast copper alloy socketed axes.
- **1288. Copper alloy socketed axe (1)**
  - **Cardiff:** National Museum and Galleries of Wales (68.221/1)
  - **LE:** 11,2cm
  - **WI (blade):** 6,2cm
  - **WI (socket, inner-outer):** 3,2-4,3cm
  - **LE (socket, inner-outer, back-front):** 2,9-4,0cm
  - **WE:** 364,0g
  - **Description:** Cast copper alloy socketed looped axe with smooth surface and dark green/turquoise patina. The axe has a single mouth moulding and a very slightly raised rib underneath (much less than a second mouth moulding). The socket is rectangular and aligned with the blade. Each face is decorated

with three evenly spaced ribs. The blade has been hammered into a splayed, semi-circular shaped form and the corners are now aligned almost horizontally. There are clear signs of use.

- **1289. Copper alloy socketed axe (2)**
  - **Cardiff:** National Museum and Galleries of Wales (68.221/2)
  - **LE:** 10,25cm
  - **WI (blade):** 6,75cm
  - **WI (socket, inner-outer):** 2,95-4,2g
  - **LE (socket, inner-outer, back-front):** 2,75-3,4cm
  - **WE:** 344,4g
  - **Description:** Cast copper alloy socketed looped axe with smooth surface and dark green/turquoise patina with light green/white spots. The axe has a double mouth moulding with a thicker upper and thinner, rib-like mouth moulding underneath and three ribs terminating in pellets on each face. The socket is rectangular and aligned with the cutting edge. The axe is wedge-shaped with diverging sides and the cutting edge has been hammered into a wide splayed form. There are clear signs of use.
- **References:** Savory 1980, no. 286.
- **Cardiff:** National Museum and Galleries of Wales (68.221.1-2)
- **Plates 117 and 118**

Single finds:

1290. Llanbedr Dyffryn, Clywd, Denbighshire (SJ1412656066)

- **Copper alloy socketed axe**
- **Type**: Sompting, Tower Hill variant
- **LE:** 10.24cm
- **WI (Blade):** 6.31cm
- **Thickness:** 3.6cm
- **WE:** 306.3g
- **Description:** Cast copper alloy socketed looped axe. The surface has a bright mottled green patina with some original smooth brownish surface patina still in evidence. The axe is undecorated with flat plain sides, no edge chamfer and broadly splayed to the cutting edge; the seam sides are wedge shape in plan and slightly convex with clear casting lines. Although there are numerous marks/gouges to the surface of the axe, they look to be due to the passage of time in the ground. There are no clear signs of use.
- **Note on the damage:** There is significant and extensive damage that appears to be contemporary with the date of the axe. One side of the blade has been struck very hard with a heavy round object such to cause the axe to bend and split on the opposing face. The edge of the blade has then also been

struck several times with a similar heavy round object, leading to an almost denticulate edge with four clear strikes. The damage must have been deliberate and had rendered the axe useless. The reason for the damage may only be speculated at; it may have been an unsatisfactory casting or perhaps prepared for votive use or simply come to the end of its useful life. **References:** www.finds.org.uk Find ID: CPAT-5486C1
- **Returned to finder (metal-detecting find**)
- **Plate 119**

Flintshire

Hoards: none

Single finds:

1291. Y Glol, Flintshire (centred on hillfort: SJ119781)
- **Possibly from a settlement site/hillfort**
- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **Description:** Plain cast copper alloy socketed looped axe.
- **Note:** Found close to the 'rampart' of an unexcavated camp (Y Glol).
- **References:** Davies 1917, 433-4.
- **Location:** St Asaph Cathedral Library

Glamorgan

Hoards:

1292. -1293. Cardiff II (Leckwith), Glamorgan (ST165755)
- **Mixed hoard**
- **Type:** Sompting, Cardiff II variant
- **Description:** One socketed axe with rib-and-pellet decoration, one socketed axe fragment, four leather-working knives, one heeled socketed sickle, one socketed sickle fragment, one pole cap and two razors.
- **Hallstatt one-edged razor**
  - **Type:** Triangular-bladed/Llyn Fawr
  - **References:**
    1. Jockenhövel 1980, Tafel 37.
    2. O'Connor 1980, 608, List 267, no. 1.
- **Hallstatt annual razor**
  - **Type:** Circular-bladed/Type Havré (Jockenhövel)
  - **References:**
    1. O'Connor 1980, 609, List 268, no. 2.
    2. Jockenhövel 1980b, no. 478.
- **Socketed sickles**

        - **Type:** Llyn Fawr/Cardiff II
        - **Description:** Conical socket, heeled
        - **References:** Fox 1939, nos. 23-24.
    - **1292. Copper alloy axe socketed fragment**
        - **Type:** Sompting, Cardiff II variant (?)
        - **Cardiff:** National Museum and Galleries of Wales (30.130/2)
        - **Length (remaining):** 4,82cm
        - **WI (remaining):** 3,7cm (at socket)
        - **WE:** 64,6g
        - **Description:** Socket fragment of a cast copper alloy socketed looped axe with smooth surface and muddy brown patina. The whole axe would have been very much like the whole one in the hoard: The socket would have been square and the sides parallel. A part of a rib is still visible and it is likely that this axe was also decorated with ribs and pellets.
        - **Plate 120**
    - **1293. Copper alloy socketed axe**
        - **Type:** Sompting, Cardiff II variant
        - **Cardiff:** National Museum and Galleries of Wales (30.130/1)
        - **Length:** 12,49cm
        - **WE:** 6,1cm
        - **WI: (socket, inner-outer):** 2,96-4,29cm
        - **WI (back-front, inner-outer):** 3,21-4,25cm
        - **WE:** 382,1g
        - **Description:** Cast copper alloy socketed looped axe with smooth surface and muddy brown patina. The socket is square and has a double-mouth moulding with a thicker upper and thinner lower mouth moulding. Each face is decorated with three ribs (just over 5,5cm in length) terminating in pellets. The axe has almost parallel sides, but the cutting edge has been re-worked and is now splayed. There are clear signs of wear.
        - **Plate 120**
    - **Note:** The hoard was found in 1928 on the flood plain between the rivers Taff and Ely (Lecwydd Moors, Caerdydd).
    - **References:**
        - Nash-Williams 1933, 299-300.
        - Grimes 1939, 169, no. 355.
        - Savory 1976, 53.
        - Savory 1980, no. 290.
        - O'Connor 1980, 419, no. 217.
        - Thomas 1989, 281
    - **Cardiff:** National Museum and Galleries of Wales (30.130.1-11)
    - **Plates 119 and 120**

1294. -1299. Llyn Fawr, Rhigos, Glamorgan (SN917035)

- **Mixed hoard**
- **Type:** Transitional; Sompting, Cardiff II variant
- **Description:** Six rib-and-pellet decorated socketed axe (two of them are casts – the originals are with the finder), one socketed chisel, one socketed axe fragment, two heeled socketed sickles (bronze), one heeled socketed sickle (iron), three socketed gouges, one razor, three phalerae, two cheek pieces, one belt fitting, one yoke mount, one spearhead (iron), two cauldrons, one sword hilt (iron)
- **Note:**
  - The second cauldron and the sword hilt were found a couple of years later on the same site, ca. 50 m away from the original find spot
  - Fox and Hyde 1939 published the accounts of the two contractors at work: 1. T.B. Hughes (Rhondda U.D.C. Waterworks): “On the west side of the lake the slope is steep into deep water, on the east side it is shallow; the hoard was deposited on the shallow side. The find was made while I was surveying across the old lake after it had been emptied; the surveying chain, while being dragged across the surface of the peat was clinking on something metallic. I was curious and went to see what it was and discovered one of the round arm shields [=one of the three phalerae]. Although the depth of the peat was as much as ten feet (3m) we did not find any of the implements more than two feet (0.6m) from the surface of the peat.” 2. G. Stoner (contractor for the work): “the bed of the lake was a peaty bog varying in thickness from 2-3 feet (0.6-0.9m) around the margin to over 30 feet (9m) in the centre; it was decided to remove most of it and about 250 000 cu. yds. (ca. 192 000m²) was excavated, all by hand labour. In the course of days all the objects comprising the Llyn Fawr hoard and now in the Museum were brought to my office by the workmen… the cauldron was some 200 feet away from the other objects and found nearer the centre of the lake…”
- **Hallstatt razor, looped, triangular**
  - **Type:** triangular-bladed / Type Llyn Fawr
  - **References:**
    - Jockenhövel 1980, Tafel 37.
    - O’Connor 1980, 608, List 267, no. 2.
  - **Plates 129 and 130**
- **Iron sword**
  - **Type:** Mindelheim
  - **Plate 128**
- **Cauldron No. 1 (published in 1921))**
  - **Type:** Class B1, Llyn Fawr type

        - **Description:** Five sheets of tiers; uppermost (E) tier had two sheets, the others (D-B) most probably one sheet each; rim (decorated with small repoussé bosses) is stayed to the body at each handle attachment; two circular ring handles with complex cross-section and attachments; each attachment is accompanied by a pair of stays in the form of cast strips each with 2 ½ lines of herring bone decoration (Gerloff 2010, 184)
        - **Note:** It is very worn and some deliberate damage has been inflicted on the vessel to render it useless – damage in form of stab and slash marks (Gerloff 2010, 184)
        - **References:** Gerloff 2010, 182-4, no. 41
    - **Cauldron No. 2 (published in 1939)**
        - **Type:** Class B1, Llyn Fawr type
        - **Description:** Oblate globular body with marked shoulder, five ties of sheet (one A sheet and two of each B-E); rim (decorated with rectangular fields of small repoussé bosses); two ring handles with slightly rounded hexagonal cross-section (worn on inside); rim and handle attachments were never stayed to the body (Gerloff 2010, 186)
        - **References:** Gerloff 2010, 185-7.
        - **Plate 130**
    - **Socketed sickles (2 bronze, 1 iron)**
        - **Type:** Llyn Fawr/Cardiff II
        - **Note:** The iron sickle is a copy of the two bronze ones; it is unique in the British Isles. Ca. 1980 it was discovered that there are remains of the wooden haft still inside the socket of the iron sickle. The sample is too small of size for radio-carbon dating at present time, but the wood type could be determined: Ash (*Fraxinus excelsior* L.) (Green 1980, 136-7)
        - **References:**
            - Fox 1939, nos. 20-22.
            - Green 1980, 136-7.
        - **Plates 126, 127 and 130**
    - **1294. Copper alloy socketed axe (1)**
        - **Type:** Sompting, Cardiff II variant
        - **Length:** 12,79cm
        - **WI: (cutting edge):** 5,54cm
        - **WI (socket, outer-inner):** 4,56cm-3,39cm
        - **LE (socket, back-front, inner-outer):** 4,45cm-3,24cm
        - **WE:** 436,3g
        - **Description:** Cast copper alloy socket looped axe with smooth surface and patchy black/bright golden patina. The axe has square socket and double mouth moulding with a thick upper and thinner lower mouth

moulding. The axe has almost parallel sides and the cutting edge is not much splayed. It is decorated with three ribs on each face terminating in very faint pellets. Also, there are “shadows” or circlets next to the “pellets” and it might be suggested that possibly, this axe was cast in a mould that has been re-cut to decorate the axe with a different pattern
        - **Cardiff:** National Museum and Galleries of Wales (12-11/1)
        - **Plate 123**
    - **1295. Copper alloy socketed axe (2)**
        - **Type:** Transitional
        - **Length:** 10,29cm
        - **WI (cutting edge):** 5,2cm
        - **WI (socket, inner-outer):** 2,62-3,98cm
        - **LE (socket, back-front, inner-outer):** 2,3-3,5cm
        - **WE:** 243,3g
        - **Description:** Cast copper alloy socket looped axe with smooth surface and patchy black/bright golden patina. The axe has a rectangular socket with double mouth moulding and it is decorated with five unevenly spaced ribs-and-pellets on each face. The outer ribs are on the edges of the faces. It also has a casting flaw (hole) below the loop. The axe is wedge-shaped and the cutting edge is only very slightly splayed. There are definite signs of usage and re-sharpening marks parallel to the cutting edge.
        - **Note:** This axe was made in the same mould or from the same mould template as axe nos. 1296 and 1299.
        - **Cardiff:** National Museum and Galleries of Wales (12-11/2)
        - **Plates 123 and 124**
    - **1296. Copper alloy socketed axe (3)**
        - **Type:** Transitional
        - **Length:** 10,34cm
        - **WI (cutting edge):** 5,83cm
        - **WI (socket, inner-outer):** 2,6-3,98cm
        - **LE (socket, inner-outer):** 2,5-3,4cm
        - **WE:** 299,0g
        - **Description:** Cast copper alloy socket looped axe with rough surface and dark coppery black/golden patina. This axe has the same outline as socketed axe Mus. No. 12-11/2; the only difference is that it has no casting flaw beneath the loop and it is heavier (maybe this axe was cast first?). The sides of this axe are a little more splayed than those of the other axe. Also, the cutting edge shows re-sharpening marks and clear signs of usage. There are deep nicks and dents in the blade. It seems that either, another metal edge was hit

with this axe – or, alternatively, another metal tool was used to cause the damage on the axe's blade.
        - **Note:** This axe was made in the same mould or from the same mould template as axes no. 1295 and 1299.
        - **Cardiff:** National Museum and Galleries of Wales (12-11/3)
        - **Plates 123 and 124**
    - **1297. Copper alloy socketed axe (4)**
        - **Type:** Transitional
        - **Length:** 10cm
        - **WI (cutting edge):** 4,64cm
        - **WI (socket, inner-outer):** 2,85-3,9cm
        - **LE (socket, inner-outer):** 2,4-3,3cm
        - **WE:** 216,3g
        - **Description:** Cast copper alloy socket looped axe with smooth surface and dull light golden patina with darker gold and black patches. The axe is very similar to axes 1294 and 1295, but it does not come from the same mould. The socket is aligned with the cutting edge and it has an incomplete double mouth moulding. There is a casting flaw in the loop (it is not a full semi-circle). The axe used to have fairly straight and almost parallel sides, but they have changed their shape when the cutting edge was hammered into splayed form. The cutting edge is still fairly sharp and has clear re-sharpening marks on it. The axe is decorated with five ribs ending in pellets; on one side, they are even, on the other face, they are not.
        - **Cardiff:** National Museum and Galleries of Wales (12-11/4)
        - **Plates 123 and 124**
    - **1298.+1299. Replicas of copper alloy axes 5 and 6**
    - **Cardiff:** National Museum and Galleries of Wales (82.86H (both have the same number))
    - **1298. Axe 5**
        - **Type:** Sompting, Cardiff II variant
        - **LE:** 11,8cm
        - **WI (cutting edge):** 5,7cm
        - **WI (socket, inner-outer):** 3,2-4,15cm
        - **LE (socket, back-front, inner-outer):** 2,9-4,0cm
        - **WE:** /
        - **Description:** Replica of socketed axe with double mouth moulding and three ribs-and-pellets on both faces.
        - **Plates 123 and 125**
    - **1299. Axe 6**
        - **Type:** Transitional
        - **LE:** 10,4cm
        - **WI (cutting edge):** 5,3cm

        - **WI (socket, inner-outer):** 2,5-4,0cm
        - **LE (socket, back-front, inner-outer):** 2,3-3,4cm
        - **WE:** /
        - **Description:** This axe was made in the same mould or from the same mould template as axes no. 1295 and 1296.
        - **Plates 123 and 124**
    - **References:**
        - Crawford and Wheeler 1921, 133-140.
        - Fox and Hyde 1939, 369-404.
        - Grimes 1939, no. 455a, 192-199.
        - Savory 1976, 46-55.
        - Savory 1980, no. 291-294.
        - O'Connor 1980, 420, no. 218.
        - Green 1985, 288-90.
        - Thomas 1989, 281.
        - Gerloff 2010, 182-7.
    - **Cardiff:** National Museum and Galleries of Wales (12.11.1-21, 82.86H.1-2 (two casts) and 36.624.1-2 (second cauldron and sword))
    - **Plates 123-129**

1300. -1327. St Mellon's, South Glamorgan (centred on parish: ST235815)

- **Axe hoard (transitional?)**
- **Type:** Stogursey / South Welsh socketed axes
- **Description:** The hoard contains 25 (plus one later, single find, from the same area) socketed axes.
- **Note:** Stanton's analysis of the axes is very significant as she was able to separate the axes into 'mould-groups'. According to her, the 25 axes came from 6 moulds.
- **References:** Stanton 1984, 191-6.
- **Cardiff:** National Museum and Galleries of Wales (83.37H/1-24, 83.86/1, 21.226)

Single finds:

Add.: 1405.-1407. Llanmaes, Vale of Glamorgan (SS98216963)

- **Early Iron Age midden/feasting site**
- **Description:** The site is currently being excavated and investigated. So far, it has produced fragments of a Late Bronze Age facetted axes, Armorican axes and also small axe of Sompting type, Tower Hill variant. Other finds include vessel fragments of four or more cauldrons, ring-handled bowls and ladles, pins and pottery (Post Deverel-Rimbury and Early Iron Age wares). The site at Llanmaes appears to be a large midden or rubbish mount and extremely high phosphate readings

showed that it was made up largely of faeces (animal and human), crop processing and hearth debris, slurry and animal trampling (Gwilt and Lodwick 2009, 31).

- **References:**
  - Gwilt and Lodwick 2004, 77-81.
  - Gwilt and Lodwick 2005, 91-92.
  - Gwilt, Lodwick and Deacon 2006, 42-48.
  - Gwilt and Lodwick 2007, 78-82
  - Gwilt and Lodwick 2008, 67-69.
  - Gwilt and Lodwick 2009, 29-35.
- **Cardiff:** National Museums and Galleries of Wales

1328.-1330. Penllyn Moor, near Cowbridge, South Glamorgan (centred on Penllyn Moor: SS985768)

- **Three iron socketed axes**
- **Type:** Early iron socketed axe
- **1328. Iron socketed axe**
  - **LE:** 11,7cm
  - **WI (edge):** ca. 5,2/5,3cm
  - **WI (socket, inner-outer):** 3,1-4,3cm
  - **LE (socket, inner-outer, back-front):** 1,5-3,2cm
  - **WE:** 271,4g
  - **Description:** Iron socketed axe with rough, flaky surface, corroded. The axe seems to have a single mouth moulding and the socket is aligned with the cutting edge. The loop was made separately and then attached to the socket.
  - **Note:** There are only four examples of iron socketed axes from Wales (Adam Gwilt *pers. comm.*): three were found recently at Penllyn Moor during metal detecting, and a further one, now in the British Museum, from Berwyn Mountains of Merionethshire (Manning and Saunders 1972, Fig. 4,9; Brailsford 1953, Fig. 21,1).
  - Many other Bronze Age finds come from the site at Penllyn Moor: spearheads, palstaves, a socketed knife, South Wales axes, one late facetted axe with ribs enhancing the edges of the two faces; and a collar between the two mouth mouldings (Adam Gwilt *pers. comm.*).
  - **Cardiff:** National Museum and Galleries of Wales (97.13H)
- **Note:** Very recent finds, one of which has been purchased by the National Museum and Galleries of Wales.
- **References:** Unpublished.
- **Cardiff:** National Museum and Galleries of Wales (97.13H)
- **Plate 131**

1331. Newton Nottage, Mid Glamorgan (centred on Newton Nottage Rd: SS828778)

- **Copper alloy socketed axe**
- **Type:** Armorican (small)
- **LE:** 7,76cm
- **WI: (edge):** 2,41cm
- **WI (socket, inner-outer):** 1,14-1,77cm
- **LE (socket, inner-outer, back-front):** 1,47-2,16cm
- **WE:** 77,1g
- **Description:** Small cast copper alloy socketed looped axe in as-cast condition.
- **References:** Unpublished.
- **Cardiff:** National Museum and Galleries of Wales (24.460)
- **Plate 131**

Merionethshire

Hoards: none

Single finds:

1332. Berwyn Mountains, Merionethshire (centred on Berwyn Mountains: SJ046365)

- **Iron socketed axe**
- **Type:** Earliest iron axe
- **Note:** Exact provenance unknown. Rediscovered among a collection of miscellaneous iron work at Ruthin Castle in 1854, and found some times before in unknown circumstances. A piece of paper attached to the axe recorded that it came from the summit of the Berwyn mountains, but specified no locality.
- **References:**
  - Rainbow 1928, no. 1.
  - Manning and Saunders 1972, 285.
- **London:** British Museum (1855, 10-22, 1)

Monmouthshire:

Hoards:

1333. +1334. Chapel Hill, Tintern, Monmouthshire (ST53349736)

- **Axe hoard**
- **Type:** Armorican
- **Description:** Two cast copper alloy socketed looped axes in as-cast condition.
- **1333. Copper alloy socketed axe (1)**
  - **Cardiff:** National Museum and Galleries of Wales (43.221/1)

        - **Length:** 13,72cm (from cutting edge to socket: 11,87cm)
        - **WI (cutting edge):** 3,17cm
        - **WI (socket, inner-outer):** 1,74-3,12cm
        - **WI (socket, inner-outer, back-front):** 2,35-3,49cm
        - **WE:** 286,5g
        - **Description:** Cast copper alloy socketed looped axe of Armorican type. The axe has a smooth surface and a dark green patina. The sides are almost parallel and the cutting edge is narrow and blunt. The axe has a double mouth moulding with the lower mouth only present on the faces. The socket is of sub-rectangular shape above the upper, thicker mouth moulding, the casting flashes have not been smoothed. Some fragments of the clay core are still inside the socket.
    - **1334. Copper alloy socketed axe (2)**
        - **Cardiff:** National Museum and Galleries of Wales (43.221/2)
        - **Length:** 12,82cm (from cutting edge to socket): 12,25cm
        - **WE (cutting edge):** 3,2cm
        - **WI (socket, inner-outer):** 2,62-3,47cm
        - **WI (socket, inner-outer, back-front)** 2,79-4,21cm
        - **WE:** 286,5g
        - **Description:** Cast copper alloy socketed looped axe of Armorican type. The axe has a smooth surface and a dark green patina. The sides are straight and almost parallel and the cutting edge narrow and blunt. The axe has a double mouth moulding with a thicker upper and thinner lower mouth moulding. The mouth of the socket is aligned back-to-front. There are still bits of the clay core left in the inside of the socket.
    - **References:**
        - Savory 1946-47, 114-5.
        - Savory 1980, no. 289.
        - Thomas 1989, 282
    - **Cardiff:** National Museum and Galleries of Wales (43.221.1+2)
    - **Plates 132 and 133**

Single finds:

1335. Abercarn, Monmouthshire (centred on town: ST215945)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 12,04 cm
- **WI (cutting edge):** 6,14cm
- **WI (socket, inner-outer):** 3,5-4,7cm
- **WI (socket, back-front, inner-outer):** 3,2-3,25cm

- **WE:** 333,6g
- **Description:** Cast copper alloy socketed looped axe with rough surface and greenish patina. The axe has a double mouth moulding with a thick upper and thinner lower mouth moulding. The socket is rectangular and aligned with the cutting edge. The two faces are decorated with two ribs (ca. 5,8cm) ending in pellets and there is another set of ribs enhancing the edges of the faces – and equally ending in pellets. The sides of the axe are almost parallel, but the blade has been hammered into a splayed form. The loop is very thin and not spurred.
- **References:** Savory 1980, no. 223.
- **Cardiff:** National Museum and Galleries of Wales (22.99)
- **Plate 133**

Unprovenanced:

1336. 'Group from South-West England' (not mapped)

- **Probably a multi-period hoard**
- **Type:** Blandford (possibly) and others.
- **Description:** The contents of this hoard are in Lord MacAlpine's collection and were briefly looked at by MacGregor and Northover, but no full publication of the finds exists. MacGregor and Northover suggest that the assemblage is similar to the assemblages from Kings Weston Down (Bristol, nos. 52-73) and Salisbury (Wiltshire, nos. 1061-1202).
- **References:** MacGregor (ed.) 1987, 19, Group 3, Plate 11.

1337. "Hounslow (?)" (centred on parish: TQ145755)

- **Cast copper alloy axe**
- **Type:** Sompting, Kingston/Tower Hill variant
- **Description:** Cast copper alloy socketed looped axe with three raised ribs forming an upside-down chevron just below the lower mouth moulding. There is another group of three thin ribs on either side of the chevron.
- **Note:** Apparently, this axe has been found with a flat celt, a palstave and another socketed celt (Evans 1881, 128).
- **References:** Evans 1881, 128, fig. 149.
- **London:** British Museum.

1338. "Scotland"

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **LE:** 13,2cm
- **WI (blade):** 7,1cm
- **LE (mouth, inner-outer),** 3,3-4,3cm
- **WI (mouth, inner-outer):** 3,25-3,65

- **WE:** 430,3g.
- **Description:** Cast copper alloy socketed looped axe which has never been used or re-sharpened (the cutting edge is about 3-4mm thick). The patina is light-olive green with darker green patches. The socket is sub-rectangular and a single large mouth-moulding. Also, its faces are decorated with two long ribs (7,4cm in length) terminating in a very small pellet. Both pellets on both faces are encircled by a circle of ca. 1,1cm (diameter). The socket is 9,7cm deep.
- **References:** Schmidt and Burgess 1981, no. 1575.
- **Edinburgh:** National Museum of Antiquities of Scotland (X.L.1963.49)
- **Plate 134**

1339. "Scotland"

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant?
- **LE:** 12,3cm
- **WI (cutting edge):** 5,5cm
- **WI (socket, inner-outer):** 2,7-3,8cm
- **LE (socket, inner-outer, back-front):** 3,2-4,1cm
- **WE:** 381g
- **Description:** Cast copper alloy socketed looped axe with rib-and-pellet decoration. The cutting edge is narrow and the overall shape is wedge-shaped. The sides are almost parallel and it displays a double-mouth moulding: a thick upper and smaller lower mouth moulding. The patina is dark golden/olive green and there are very clear re-sharpening marks running parallel to the curved cutting edge. The three ribs terminate in small pellets: the central rib is c 5,7cm long.
- **References:** Schmidt and Burgess 1981, no. 1592
- **Edinburgh:** National Museum of Antiquities of Scotland (X.DE24)
- **Plate 135**

1340. "Scotland"

- **Copper alloy socketed axe**
- **Type:** Linear-decorated
- **LE:** 9,0cm
- **WI (cutting edge):** 4,7cm
- **WI (socket, inner-outer):** 2,5-3,4cm
- **LE (socket, back-front, inner-outer):** 2,4-3,1cm
- **WE:** 135g
- **Description:** Cast copper alloy socketed looped axe with shiny dark turquoise patina. Its surface is somewhat corroded and the shallow decoration is no longer clearly visible, but it seems that it consisted of two distinct ribs close to the edges of each face.
- **References:** Schmidt and Burgess 1981, no. 16C14.

- **Edinburgh:** National Museum of Antiquities of Scotland (X.L.1963.48)
- **Plate 135**

1341. "Thames opp. Greenwich, London" (centred on Thames at Greenwich: TQ384780)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **LE:** 12cm
- **WI (cutting edge):** 6,5cm
- **WI (socket, inner-outer):** 3,0-3,7cm
- **LE (socket, back-front, inner-outer):** 3,2-4,1cm
- **WE:** 424,125g
- **Description:** Plain cast copper alloy socketed looped axe with dark golden brown patina with black patches and flecks. The surface is smooth apart from a few scratches. The axe has a sub-rectangular double mouth moulding with a thick upper and thinner lower mouth moulding. The loop is typically round. There are faint hammer marks on the surface of the axe – probably from the re-shaping of the cutting edge, which is now broadly splayed. It also shows other signs of wear: re-sharpening marks and nicks in the blade although it is still fairly sharp. The label that used to be attached to the axe has worn off and is torn.
- **British Museum Register:** "Copper alloy celt, socketed with loop, L: 4¾ in., W: 2 6/10 in., Presented by the Trustees of the Christy Collection, Thames opposite Greenwich."
- **References:** Unpublished.
- **London:** British Museum (1866, 6-27, 54)

1342. "Thames, London" (not mapped)

- **Copper alloy socketed axe**
- **Type:** Tower Hill (?unsharpened)
- **References:** Unpublished.
- **London:** British Museum (1865, 6-20, 3)

1343. "Thames, London" (centred on London Bridge: TQ328805)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **LE:** 11,2cm
- **WI (cutting edge):** 5,8cm
- **WI (socket, inner-outer):** 3,3-3,7cm
- **LE (socket, back-front, inner-outer):** 3,3-4,5cm
- **WE:** 390,085g
- **Description:** Plain cast copper alloy socketed looped axe with scratchy surface. The patina is smooth and of shiny dark brown colour on one side and almost completely flaked off on the other. The axe has a sub-rectangular double mouth moulding, neither moulding being very pronounced. Also, the

upper mouth moulding seems ‘cut off’ at the top – maybe this is a casting flaw(?). There is another casting flaw – a small hole – in the upper mouth moulding. Wood from the wooden haft remains inside the socket. The sides are somewhat parallel; the cutting edge is only slightly splayed. The blade is still sharp, but there are no obvious re-sharpening marks or other signs of wear. The loop is characteristically rounded. A label is stuck to the upper part of the axe, obstructing the lower mouth moulding on one side.

- **Note:** The label reads: Thames at London Bridge, Nov. 184(?)
- **British Museum Register:** “(?) under this date is registered the collection of London Antiquities formed by (?) C. Roach Smith for which see the interleaved catalogue of his collection; most of the objects are marked C.R.S. Purchased from C.R. Smith.”
- **References:** Unpublished.
- **London:** British Museum (1856, 7-1, 1372 C.R.S.)

1344. “Thames” (not mapped)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant?
- **Description:** Cast copper alloy socketed looped axe: the upper part of the face is decorated with a rectangular box – the upper border being the lower mouth moulding and the lower border being a separate horizontal rib. From this horizontal rib descend three vertical ribs which terminate in double circlets with a central pellet.
- **Note:** This socketed axe is very similar to the single find from the Thames near Kingston (no. 994).
- **References:**
  - Evans 1881, 125, fig. 140.
  - O’Connor 2007, 78.
- **London:** British Museum?

1345. “Thames” (not mapped)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **Description:** Evans reports that, “in another very rare specimen the vertical lines are replaced by two double chevrons of pellets, the upper one reversed. There is still a ring ornament at the base, and lines of pellets running down the margins of the blade.” (Evans 1881, 126-127):
- **References:** Evans 1881, 126-127, fig. 143.
- **London:** T. Layton Collection

1346. “No provenance” (not mapped)

- **Copper alloy socketed axe**
- **Type:** Sompting, Cardiff II variant
- **LE:** 13,1cm

- **WI (cutting edge):** 5,4cm
- **WI (socket, inner-outer):** 3,2-4,4cm
- **LE (socket, back-front, inner-outer):** 3,4-4,4cm
- **WE:** 412,6g
- **Description:** Large, heavy cast copper alloy socketed looped axe with almost parallel sides and a small loop. It has a square socket and double mouth moulding with thicker upper and thin lower mouth moulding. The faces are decorated with five parallel, straight ribs (ca. 5cm in length) terminating in small pellets. The two outer ribs coincide with the edges of the faces. The blade shows signs of wear and re-sharpening marks and it had been hammered into slightly splayed shape.
- **References:** Unpublished.
- **Cambridge:** University of Cambridge Museum of Anthropology and Archaeology (Z.44562/1883.148)

1347. "Unprovenanced" (not mapped)

- **Copper alloy socketed axe**
- **Type:** Transitional
- **LE:** 10,5cm
- **WI (edge):** 5,3cm
- **WI (socket inner-outer):** 3,0-3,8cm
- **LE (socket, back-front, inner-outer):** 3,15-4,0cm
- **WE:** 304,3g
- **Description:** Cast copper alloy socketed looped axe with rough surface and dark green/turquoise patina with white/beige patches. The axe has a double mouth moulding with thick upper and thinner lower mouth moulding. The socket is not aligned with the blade (only slightly, but recognisable). The sides of the axe are not parallel and it is wedge-shaped. The cutting edge has been reworked to a curved, splayed form and it is still sharp and unspoiled. Due to the patina fine marks of re-sharpening are not recognisable anymore. The faces are decorated with three evenly spaced simple ribs each (ca. 4,5cm in length).
- **References:** Unpublished.
- **Cardiff:** National Museum and Galleries of Wales (63.413/1)
- **Plate 136**

1348. "Unprovenanced" (not mapped)

- **Copper alloy socketed axe**
- **Type:** Sompting, Figheldean Down variant(?)
- **Description:** Ribbed.
- **Note:** 'probably' Britain
- **References:** Nicholson 1980, no. 227.
- **Liverpool:** Merseyside County Museum (51.12.23)

1349. "Unprovenanced" (not mapped)

- **Copper alloy socketed axe**

- **Type:** Sompting, Kingston variant?
- **Description:** Socketed axe with one circlet and central pellet
- **Note:** 'probably' Britain
- **References:** Nicholson 1980, no. 236.
- **Liverpool:** Merseyside County Museum (53.114.687 (Nelson))

1350. "Unprovenanced" (not mapped)

- **Copper alloy socketed axe**
- **Type:** Transitional? Sompting, Cardiff II variant?
- **Description:** Socketed axe with five long ribs terminating in pellets
- **Note:** 'probably' Britain
- **References:** Nicholson 1980, no. 237.
- **Liverpool:** Merseyside County Museum (53.114.688 (Nelson))

1351. Unknown (not mapped)

- **Iron socketed axe**
- **Type:** Earliest iron axe
- **Note:** The only information that we have of this axe come from a footnote relating to the socketed iron axe from the Berwyn Mountains (Merionethshire, no. 1332): "…A second instance of an Iron Celt or Axe with part of the wooden handle in it, has recently come to my knowledge. If I am not mistaken, it is in the collection of John Hughes, Esq., of Gwerclas." (Editor (?) of Archaeologia Cambrensis, Volume VI (1860), 309)
- **References:** Manning and Saunders 1972, 288.
- **Lost** (possibly John Hughes', Esq., Collection, of Gwerclas (?))

1352. Unknown (not mapped)

- **Iron socketed axe**
- **Type:** Earliest iron axe
- **Note:** Manning and Saunders write: "In August 1867, a 'curious celt' was exhibited at the temporary museum of the Cambrian Archaeological Society's Hereford meeting, by Mr. W. Taylor, Q.C. (Archaeologia Cambrensis, Volume XIII (1867), 417). This must have been the axe that had previously been exhibited at the Society of Antiquaries earlier in the year but unfortunately no further details of this axe are available."
- **References:** Manning and Saunders 1972, 286.
- **Lost.**

1353. Unknown (not mapped)

- **Iron socketed axe**
- **Type:** Earliest iron axe
- **Note:** Manning and Saunders write: "A note in the Proceedings of the Society of Antiquaries, Volume III (1867), 518, records that on the 20th June 1876 'William Taylor, Esq., F.S.A. exhibited, by kind permission of Thos. Goulbourn Parker Esq., some specimen from the collection of British and other

Antiquities formed by the late A.C. Kirkmann, Esquire…3. An Iron Celt with loop resembling the specimen now in the British Museum, and found in N. Wales some years ago." Evans (1881, 144) read this to mean that this example came from N. Wales but the reference would seem to refer to the example from the Berwyn Mountains (Merionethshire, see above)."

- **References:** Manning and Saunders 1972, 286.
- **Lost.**

Recently added hoards and single finds:

Add: 1354.-1387. Hindon, Wiltshire (ST 91196 31889)

- **Axe dominated hoard**
- **Type:** Hindon (33); Sompting, Cardiff II variant (1)
- **Description:** An Early Iron Age hoard discovered in late 2011 by a metal detectorist and excavated by the local FLO and the assistant County Archaeologist on January 18th, 2012. The hoard contains 82 copper alloy and iron objects: 34 cast copper alloy socketed looped axes, 39 copper alloy rings, 2 copper alloy bracelets/bangles, 3 iron spearheads, 1 iron sickle and several (2 joining) fragments of copper alloy sheet metal.
- **1354. Copper alloy socketed axe (No. 49)**
  - **Type:** Sompting, Cardiff II variant (probably)
  - **Length:** 12.8cm
  - **WI (cutting edge):** 5.9cm
  - **WI (socket, inner-outer):** 2.5-4cm
  - **WI (socket, inner-outer, back-front):** 2.8-4.1cm
  - **WE:** 461g
  - **Description:** Cast copper alloy socketed looped axe of Sompting type. Complete. Side looped. Bulbous, sub-rectangular, double mouth moulding. Blade shows definite signs of wear and re-sharpening. Both faces are decorated with seven ribs ending in pellets, two of which are on outer edges of the faces. Most of the casting seams have been removed, some are still in place.
  - **Plate 136**
- **1355. Copper alloy socketed axe (No. 74)**
  - **Type:** Hindon (variant)
  - **Length:** 9.72cm
  - **WI (cutting edge):** 5cm
  - **WI (socket, inner-outer):** 2.3-2.8cm
  - **WI (socket, inner-outer, back-front):** 2.2-3cm
  - **WE:** 157g
  - **Description:** Cast copper alloy socketed looped axe. Hindon type (variant). Related to Portland, East Rudham and Blandford types. Complete. Side-looped,

high tin alloy, double mouth moulding, straight triangular blade, casting flashes prominent on sides, blade and mouth. Decorated on both faces with two central ribs which are diverging towards the end, terminating in pellets within small circlets. Axes of this type are characteristically cast with a high-tin content and have a very shiny silvery surface, probably due to an enrichment in eutectoid during casting by the so called tin-sweat phenomenon. The two parts of the cast axe have split and broken apart along the blade.

- **1356. Copper alloy socketed axe (No. 72)**
  - **Type:** Sompting, Cardiff II variant (probably)
  - **Length:** 9.9cm
  - **WI (cutting edge):** 5.9cm
  - **WI (socket, inner-outer):** 2.3-3.7cm
  - **WI (socket, inner-outer, back-front):** 2.5-3.6cm
  - **WE:** 378g
  - **Description:** Cast copper alloy socketed looped axe of Sompting type. Complete. Side looped. Bulbous, sub-rectangular, double mouth moulding. Blade shows definite signs of wear and re-sharpening. Decorated with three ribs.
- **1357. Copper alloy socketed axe (No. 63)**
  - **Type :** Sompting, Tower Hill variant
  - **Length:** 11.4cm
  - **WI (cutting edge):** 7.1cm
  - **WI (socket, inner-outer):** 2.8-3.7cm
  - **WI (socket, inner-outer, back-front):** 2.8-4.2cm
  - **WE:** 424g
  - **Description:** Plain Cast copper alloy socketed looped axe of Sompting type. Complete. Bulbous, sub-rectangular mouth, double mouth moulding. Blade shows definite signs of wear and re-sharpening. The crescentic blade has almost “curled up” corners. Much of the casting seams have been removed, some remain on sides of axe. The axe is undecorated.
- **1358. Copper alloy socketed axe (No. 43)**
  - **Type:** Hindon
  - **Length:** 9.54cm
  - **WI (cutting edge):** 5.26cm
  - **WI (socket, inner-outer):** 2.2-2.6cm
  - **WI (socket, inner-outer, back-front):** 2.2-2.9cm
  - **WE:** 109g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes somewhat prominent on sides, blade and mouth, but trimmed in places. It has a square/nearly sub-rectangular mouth moulding and a very small side

loop. Undecorated. One side is missing the lower half of the body and the clay core is showing through. The core is of reddish/orange colour.

- **1359. Copper alloy socketed axe (No. 52)**
  - **Type:** Hindon
  - **Length:** 10.3cm
  - **WI (cutting edge):** 5.7cm
  - **WI (socket, inner-outer):** 1.6-2.6cm
  - **WI (socket, inner-outer, back-front):** 2.1-2.6cm
  - **WE:** 119g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes prominent on sides, blade and especially mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated. Some iron residue seems to be left on one of the faces.
- **1360. Copper alloy socketed axe (No. 51)**
  - **Type:** Hindon
  - **Length:** 9.2cm
  - **WI (cutting edge):** 4.4cm
  - **WI (socket, inner-outer):** 2.2-2.9cm
  - **WI (socket, inner-outer, back-front):** 2.2-2.7cm
  - **WE:** 120g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes prominent on sides, blade and especially mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated. Some iron residue seems to be left on one of the faces.
- **1361. Copper alloy socketed axe (No. 56)**
  - **Type:** Hindon
  - **Length:** 9.1cm
  - **WI (cutting edge):** 4.3cm
  - **WI (socket, inner-outer):** 1.9-2.2cm
  - **WI (socket, inner-outer, back-front):** 2.2-2.7cm
  - **WE:** 110g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Slightly miscast mouth. Probably iron residue on surface. Undecorated.
- **1362. Copper alloy socketed axe (No. 1)**
  - **Type:** Hindon
  - **Length:** 9.4cm
  - **WI (cutting edge):** 4.2cm

        - **WI (socket, inner-outer):** 2-2.7cm
        - **WI (socket, inner-outer, back-front):** 2-2.6cm
        - **WE:** 125g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated. Some iron residue seems to be left on one of the faces.
    - **1363. Copper alloy socketed axe (No. 54)**
        - **Type:** Hindon
        - **Length:** 9.5cm
        - **WI (cutting edge):** 4.45cm
        - **WI (socket, inner-outer):** 2-2.6cm
        - **WI (socket, inner-outer, back-front):** 2-2.7cm
        - **WE:** 139g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes prominent on sides, blade and mouth. It has a sub-rectangular mouth moulding and a very small side loop. Tip of blade broken. The outermost edge is fractured and slightly bent and cracked. Core still intact. Small hole (casting flaw) in side opposite side with loop. Undecorated.
    - **1364. Copper alloy socketed axe (No. 59)**
        - **Type:** Hindon
        - **Length:** 9.2cm
        - **WI (cutting edge):** 4.3cm
        - **WI (socket, inner-outer):** 2-2.6cm
        - **WI (socket, inner-outer, back-front):** 2.2-2.6cm
        - **WE:** 125g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
    - **1365. Copper alloy socketed axe (No. 42)**
        - **Type:** Hindon
        - **Length:** 9.5cm
        - **WI (cutting edge):** 4.3cm
        - **WI (socket, inner-outer):** 1.9-2.8cm
        - **WI (socket, inner-outer, back-front):** 1.8-2.6cm
        - **WE:** 108g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes

prominent on sides, blade and mouth, but seem to have been flattened in lower part of axe. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.

- **1366. Copper alloy socketed axe (No. 62)**
  - **Type:** Hindon
  - **Length:** 9.3cm
  - **WI (cutting edge):** 4.2cm
  - **WI (socket, inner-outer):** 2.2-2.7cm
  - **WI (socket, inner-outer, back-front):** 2-2.6cm
  - **WE:** 123g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated. Clay core still intact.
- **1367. Copper alloy socketed axe (No. 55)**
  - **Type:** Hindon
  - **Length:** 9.5cm
  - **WI (cutting edge):** 4.1cm
  - **WI (socket, inner-outer):** 2.1-2.7cm
  - **WI (socket, inner-outer, back-front):** 2.4-2.9cm
  - **WE:** 140g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated. One corner of blade and lower part of axe splintered and cracked, missing. Clay core showing through. Casting seams still intact and especially pronounced around the loop – more pronounced than on any of the other axes.
- **1368. Copper alloy socketed axe (No. 44)**
  - **Type:** Hindon
  - **Length:** 9.1cm
  - **WI (cutting edge):** 4.2cm
  - **WI (socket, inner-outer):** 1.9-2.6cm
  - **WI (socket, inner-outer, back-front):** 2-2.6cm
  - **WE:** 117g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated. Greenish patina,

silver sheen in patches. Fractured along blade and along lower part of sides along casting seams.

- **1369. Copper alloy socketed axe (No. 48)**
  - **Type:** Hindon
  - **Length:** 9.1cm
  - **WI (cutting edge):** 4.2cm
  - **WI (socket, inner-outer):** 2.1-2.6cm
  - **WI (socket, inner-outer, back-front):** 1.9-2.7cm
  - **WE:** 135g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
- **1370. Copper alloy socketed axe (No. 61)**
  - **Type:** Hindon
  - **Length:** 9.3cm
  - **WI (cutting edge):** 4.3cm
  - **WI (socket, inner-outer):** 2.1-2.6cm
  - **WI (socket, inner-outer, back-front):** 2.3-2.7cm
  - **WE:** 122g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
- **1371. Copper alloy socketed axe (No. 77)**
  - **Type:** Hindon
  - **Length:** 9.2cm
  - **WI (cutting edge):** 4.2cm
  - **WI (socket, inner-outer):** 1.9-2.5cm
  - **WI (socket, inner-outer, back-front):** 2.1-2.5cm
  - **WE:** 114g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated. Casting flaw in mouth moulding, opposite side with loop.
- **1372. Copper alloy socketed axe (No. 73)**
  - **Type:** Hindon
  - **Length:** 9.5cm
  - **WI (cutting edge):** 4.8cm
  - **WI (socket, inner-outer):** 2.1-2.6cm
  - **WI (socket, inner-outer, back-front):** 2.2-2.7cm
  - **WE:** 144g

        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
    - **1373. Copper alloy socketed axe (No. 71)**
        - **Type:** Hindon
        - **Length:** 9.5cm
        - **WI (cutting edge):** 4.6cm
        - **WI (socket, inner-outer):** 2.1-2.8cm
        - **WI (socket, inner-outer, back-front):** 2.3-2.8cm
        - **WE:** 153g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. Seems slightly bigger and heavier that previous axes. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated. Clay core still intact.
    - **1374. Copper alloy socketed axe (No. 67)**
        - **Type:** Hindon
        - **Length:** 9.3cm
        - **WI (cutting edge):** 4.6cm
        - **WI (socket, inner-outer):** 2.1-2.8cm
        - **WI (socket, inner-outer, back-front):** 2.3-2.8cm
        - **WE:** 153g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
    - **1375. Copper alloy socketed axe (No. 79)**
        - **Type:** Hindon
        - **Length:** 9.3cm
        - **WI (cutting edge):** 4.3cm
        - **WI (socket, inner-outer):** 2.1-2.6cm
        - **WI (socket, inner-outer, back-front):** 2.1-2.6cm
        - **WE:** 130g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
    - **1376. Copper alloy socketed axe (No. 66)**
        - **Type:** Hindon

- **Length:** 9.4cm
- **WI (cutting edge):** 4.2cm
- **WI (socket, inner-outer):** 2-2.6cm
- **WI (socket, inner-outer, back-front):** 2.1-2.6cm
- **WE:** 121g
- **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very extremely on sides and very prominent along blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.

- **1377. Copper alloy socketed axe (No. 70)**
  - **Type:** Hindon
  - **Length:** 9.5cm
  - **WI (cutting edge):** 4.6cm
  - **WI (socket, inner-outer):** 2.2-2.7cm
  - **WI (socket, inner-outer, back-front):** 2.3-2.8cm
  - **WE:** 148g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes extremely prominent on sides and very prominent on blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
- **1378. Copper alloy socketed axe (No. 53)**
  - **Type:** Hindon
  - **Length:** 9.4cm
  - **WI (cutting edge):** 4.7cm
  - **WI (socket, inner-outer): /**
  - **WI (socket, inner-outer, back-front):** 2.2-2.8cm
  - **WE:** 128g
  - **Description:** Cast copper alloy socketed looped axe. Incomplete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. ½ of the mouth and mouth moulding are missing opposite the side with the loop. Undecorated. Heavily encrusted with green patination.
- **1379. Copper alloy socketed axe (No. 57)**
  - **Type:** Hindon
  - **Length:** 9.3cm
  - **WI (cutting edge):** 4.3cm
  - **WI (socket, inner-outer):** 2-2.6cm
  - **WI (socket, inner-outer, back-front):** 1.9-2.5cm
  - **WE:** 124g

        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes extremely prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
    - **1380. Copper alloy socketed axe (No. 60)**
        - **Type:** Hindon
        - **Length:** 9.4cm
        - **WI (cutting edge):** 4.3cm
        - **WI (socket, inner-outer):** 2.1-2.7cm
        - **WI (socket, inner-outer, back-front):** 2.2-2.6cm
        - **WE:** 113g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Slightly miscast mouth moulding. Undecorated.
    - **1381. Copper alloy socketed axe (No. 78)**
        - **Type:** Hindon
        - **Length:** 9.5cm
        - **WI (cutting edge):** 4.8cm
        - **WI (socket, inner-outer):** 2.2-2.8cm
        - **WI (socket, inner-outer, back-front):** 2-2.8cm
        - **WE:** 142g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Slightly miscast cutting edge. Undecorated.
    - **1382. Copper alloy socketed axe (No. 68)**
        - **Type:** Hindon
        - **Length:** 9.4cm
        - **WI (cutting edge):** 4.4cm
        - **WI (socket, inner-outer):** 2.1-2.6cm
        - **WI (socket, inner-outer, back-front):** 2.3-2.7cm
        - **WE:** 114g
        - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes extremely prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
    - **1383. Copper alloy socketed axe (No. 65)**
        - **Type:** Hindon

- **Length:** 9.4cm
- **WI (cutting edge):** 4.6cm
- **WI (socket, inner-outer):** 2.1-2.9cm
- **WI (socket, inner-outer, back-front):** 2-2.7cm
- **WE:** 143g
- **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes extremely prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Small casting flaw (hole) beneath loop. Undecorated.

- **1384. Copper alloy socketed axe (No. 58)**
  - **Type:** Hindon
  - **Length:** 9.4cm
  - **WI (cutting edge):** 4.7cm
  - **WI (socket, inner-outer):** 2.1-2.9cm
  - **WI (socket, inner-outer, back-front):** 2.2-2.8cm
  - **WE:** 133g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes only somewhat prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
- **1385. Copper alloy socketed axe (No. 69)**
  - **Type:** Hindon
  - **Length:** 9.2cm
  - **WI (cutting edge):** 4.3cm
  - **WI (socket, inner-outer):** 2.1-2.6cm
  - **WI (socket, inner-outer, back-front):** 2.1-2.6cm
  - **WE:** 118g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes somewhat less prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
- **1386. Copper alloy socketed axe (No. 50)**
  - **Type:** Hindon
  - **Length:** 9.3cm
  - **WI (cutting edge):** 4.2cm
  - **WI (socket, inner-outer):** 2-2.6cm
  - **WI (socket, inner-outer, back-front):** 1.7-2.5cm
  - **WE:** 121g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a

square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.

- **1387. Copper alloy socketed axe (No. 64)**
  - **Type:** Hindon
  - **Length:** 9.4cm
  - **WI (cutting edge):** 4.1cm
  - **WI (socket, inner-outer):** 2-2.6cm
  - **WI (socket, inner-outer, back-front):** 2.1-2.5cm
  - **WE:** 118g
  - **Description:** Cast copper alloy socketed looped axe. Complete. Side-looped, high tin alloy, single mouth moulding, straight triangular blade, casting flashes very prominent on sides, blade and mouth. It has a square/nearly sub-rectangular mouth moulding and a very small side loop. Undecorated.
- **Discussion:** The Hindon hoard was initially discovered whilst out metal detecting on cultivated land, but subsequently retrieved under controlled archaeological excavation. The object range is as follows: copper alloy socketed axes (33), copper alloy rings (39), copper alloy bracelets/bangles (2), copper alloy fragments of sheet metal, one still wrapped around a ring (3+), iron spearheads (3), iron sickle (1). While most of the copper alloy items are in good condition, the four iron artefacts are in need of conservation. The most striking characteristic of the hoard is the unusually high number of copper alloy rings (39) and the presence of sheet-metal. The number of complete Cast copper alloy socketed looped axes (33) is high, but not unreasonably so and certainly comparable to the number of axes from other contemporary English hoards, i.e. Figheldean Down (Wiltshire, nos. 1030-1050, 21 axes), Mylor (Cornwall, nos. 147-179, 33 axes) and Tower Hill (Oxfordshire, nos. 932-953, 21 axes) (Coombs, Northover and Maskall 2003; Coombs 1979, 253-268; Thomas 1989, 281; Huth 1997, 275). While the hoards from Figheldean Down and Mylor contained only socketed axes, the hoard from Tower Hill also contained 61 bracelet- and ring fragments and other ornaments, but many of the ring/bracelet fragments were bent, folded up and incomplete.
- The socketed axes of the Hindon hoard may be divided into two groups: 1. Copper alloy axes of Sompting Type (3) and 2. high-tin copper alloy axes, one of which displays a unique decoration (31) which is unparalled in other high-tin copper alloy axes but resembles that of two axes from the Cambridge Area (nr. Ely?) (Ashmolean Museum: Acc. No. 1927.2623); University of Cambridge Museum of Anthropology and Archaeology: Acc. No. 48.2525.A). These axes are of linear-decorated type which is related to Norfolk's high-tin copper alloy axes of East Rudham type. The two axes from the Cambridge area were probably made in the same mould and

display on both faces one rib which bifurcates, both ends terminating in a circlet. The axe from Hindon displays a very similar decoration, only that there are two ribs curving outwards towards the end and terminating in what looks like a pellet-in-circlet at each end. The other three larger, heavier axes are of Sompting type. Plain and rib-and-pellet decorated Sompting type axes are known from Early Iron Age hoards such as Tower Hill (Oxfordshire, nos. 932-953), Kingston (Surrey, nos. 988-991) and Cardiff II (Vale of Glamorgan, nos. 1292-1293), while axes which were made from a high tin/low lead copper alloy are known from hoards found at Netherhampton (Wiltshire, nos. 1061-1202), Langton Matravers, Portland and Eggardon Hill (Dorset, nos. 226-598; 599-609 and 219-225) and East Rudham (Norfolk, nos. 845-886).

- The high-tin alloy axes from Hindon have no parallels in any of the other hoards: all of the other high-tin copper alloy axes from Dorset and Wiltshire are decorated with a variety of rib-and-pellet ornaments and the same kind of axes from Norfolk display an ornament of ribs along the sides of each face (i.e. linear-decorated). However, all of these axes share one important characteristic that distinguishes them from other Late Bronze Age and Early Iron Age socketed axes: they are characteristically cast with a high-tin content and have a very shiny silvery surface, probably due to an enrichment in eutectoid during casting by the so called ‘tin-sweat’ phenomenon. This shiny, silvery surface is still visible in patches on some of the axes from Hindon. It is possible that this ‘tin-sweat’ phenomenon was intentionally used in order to make the axes look shinier and more silvery in appearance. Casting iron was not possible at the time and most if not all early iron artefacts would have not had an intricate moulded decoration. Even the attachment of a small wrought iron side loop to a socketed axe made from wrought iron would have been difficult: after the initial attempt at making iron socketed axes which were almost exact copies of their copper alloy forerunners, people reverted back to making iron axes with a vertical hole for the handle. The presence of iron artefacts in a transitional hoard is fortuitous and not all that unusual for a hoard dating from the transition period or the Early Iron Age. Examples of copper alloy and iron artefacts found in association are known from Wiltshire (Melksham), the Vale of Glamorgan (Llyn Fawr) and possibly Sussex (Ferring) (Gingell 1979, 245-251; O’Connor 1980, 423, no. 224; Wiltshire Archaeological Register for 1972, 1973, 128; Wiltshire Archaeological Register for 1981, 1982, 158; Thomas 1989, 282; Osgood 1995, 50-59; Aldsworth 1985, 4; Huth 1997, 275; Crawford and Wheeler 1921, 133-140; Fox and Hyde 1939, 369-404; Grimes 1939, no. 455a, 192-199; Savory 1976, 46-

55; Savory 1980, no. 291-294; O'Connor 1980, 420, no. 218; Green 1985, 288-90; Thomas 1989, 281; Gerloff 2010, 182-7).

- It is likely that a greater number of transitional hoards included iron artefacts, but early iron objects were made from wrought iron and because they generally degrade very quickly (depending on soil conditions), they do not usually leave more than a trace in the ground. Without archaeological investigation of the findspot fragments may have been overlooked by finders in the past. Generally speaking, the counties of Wiltshire and Glamorgan are renowned for discoveries of earliest iron artefacts, for example socketed axes made from wrought iron (Penllyn Moor, Vale of Glamorgan) and iron sickles, knives, etc (All Cannings Cross, Wiltshire) (Cunnington 1922, 13-18; Cunnington and Cunnington 1923; British Museum Iron Age Guide 1925, 89; Dunning 1934, 270-1, fig. 2.1; Harding, D.W. 1974, 155-56, fig. 41; O'Connor 1980, 597, List 250, no. 3.). However, nearly all of these early iron artefacts come from settlements (e.g. All Cannings Cross) or middens such as Potterne and East Chisenbury (both Wiltshire). The context at Penllyn Moor (Glamorgan) is uncertain. Generally it appears that thetypes of early iron artefacts which were deposited in association with copper alloy artefacts were limited, however: the Hindon hoard contained three iron spearheads and one iron sickle. The same iron artefact types were discovered at Melksham (Wiltshire) and Llyn Fawr (Glamorgan). Hindon's iron sickle is only the second iron sickle discovered in a hoard context: the only other specimen was found deposited at Llyn Fawr (Vale of Glamorgan, South Wales), Two further iron spearheads were discovered in the River Avon at Melksham (Wiltshire), together with three copper alloy spearheads, one rapier blade and three phalerae (decorative horse trappings). The major difference between the finds is their overall condition (Melksham and Llyn Fawr were finds from clearly wet contexts which may have aided their excellent preservation) and the fact that while Llyn Fawr's sickle was socketed, Hindon's is tanged. Furthermore Hindon's spearheads are smaller than Llyn Fawr's and undecorated, very much unlike the larger of the two iron spearheads from Melksham. However, the smaller of Melksham's spearheads is an excellent parallel as it seems to be of the same size, shape and it is undecorated, too. It is important to note here that the above-mentioned early iron artefacts from Llyn Fawr and Melksham were predominantly deposited in association with socketed axes, items of horse trappings, harness decorations and vessels. This may help us with the identification of the other, somewhat less straight-forward items in the Hindon hoard: the rings and fragments of riveted sheet metal. While no. 75 is most certainly a Late Bronze Age penannular bracelet with decorated terminals, it

seems more likely that a number of shaped rings such as nos. 13, 15, 17 and 18 (lozenge-shaped cross section), no. 21 (hexagonal cross section) and no. 76 (grooved ring) were handles of sheet metal cauldrons of Class A1 (Type Tul-na-cross) and Class B1 (Types Llyn Fawr, Ballyshannon and Castlederg) (Gerloff 2010, Pl. 17, 7b; Pl.32, 14a; Pl. 33, 14f-h; Pl. 34, 15d, Pl. 54, 33c and Pl. 66, 37g). The fragments of sheet metal are difficult to identify. Even though they may well have been part of a copper alloy cauldron or bucket, we have no evidence for that. Most of the sheet metal has not been found folded around one of the rings, except for no. 36 and no. 47 which was folded around ring no. 46. The piece of folded sheet metal seems to have been semi-circular before it was folded around one of the rings with a simple circular cross section. This type of attachment does not correspond to the lay-out of a vessel of Late Bronze Age or Early Iron Age type. It seems more likely that the folded-over sheet was attached to a leather strap or belt and that this item was part of copper alloy horse harness. The other rings are all of different shapes and sizes, but their association with the rest of the hoard cannot be doubted. It seems most likely that the simple rings with circular cross-section were part of horse trappings or else, they could have been part of a chain from which a cauldron or other vessel was suspended over a fire. We have evidence for this kind of Early Iron Age 'feasting', possibly around a pyre, from Broom (Warwickshire) and Llanmaes (Vale of Glamorgan) (Watson 1999, 43-50).

- **Note:** The hoard was examined under the Treasure Act of 1996 (Amendment 2002) because prehistoric assemblages of 2+ artefacts made from any material should be considered Treasure from 1 January 2003 and need to be reported under the Act. The hoard has been allocated the Treasure Number 2012T46. It has been recorded on the Portable Antiquities Scheme's database under the Find ID WILT-9439A7.
- **References:** Unpublished.
- **Salisbury:** Salisbury Museum
- **Plates 136-141.**

Add: 1388.-1392. Vale of Wardour, Wiltshire (ST9251926901)

- **Mixed hoard**
- **Type:** Multi-period hoard (Armorican (1); Sompting, Tower Hill variant (1); Blandford (2) and uncertain (1))

- **Description:** The hoard was initially discovered late in 2011 by a metal detectorist whilst out detecting on cultivated land, but subsequently retrieved under controlled archaeological excavation. The hoard contains c.114 bronze weapons, tools and ornaments dating from the Bronze Age to the Early Iron Age and was

probably buried in or towards the end of the 6th century BC. The object range of the hoard's contents is as follows: rapiers (2), swords (7), spearheads (29), socketed axes (9), palstaves (8), flat axe (1), socketed gouges (15), other wood-working tools (12), sickles (6), knives (6), chapes (2), dress pins (5), bracelet/collar (1), ring (1), button (1), toggle (1), strap fitting/end (1), razors (2), unidentified object (6). The percentages of the different artefact types are similar although wood-working tools such as axes, gouges, chisels, awls and punches outweigh the other classes of weapons and ornaments.

- **Discussion:** There were only nine socketed axes amongst the 114 objects that the hoard contained. This is a considerably smaller percentage than in the Salisbury hoard where one in three objects was a socketed axe (Stead 1998, 113). Four of Wardour's socketed axes (/34\, /36\, /60\ and /68\) were typical Late Bronze Age types such as South Eastern, Everthorpe and Meldreth type axes which are well-known from Late Bronze Age hoards from Yorkshire, East Anglia and Kent, but are generally uncommon in Wiltshire and Southern England. The remaining five axes can be assigned to the Llyn Fawr metalwork assemblage: two axes of Type Blandford (nos. 1388-1389), one axe of Sompting type, Tower Hill variant (no. 1390), one small Armorican axe, probably of Type Couville (no. 1391) and lastly, one axe which is also unusually small and may have been used as a pendant rather than an axe, mainly because its loop is, unusually, on one of the faces and not at one of its sides (no. 1392). In Britain, the inclusion of an Armorican axe in a mixed hoard is rare. The only parallel for a mixed or multi-period hoard that contains an Armorican axe is the hoard from Danebury which included the upper part of a larger Armorican axe (no. 689). The addition of two Blandford type axes (nos. 1388-1389) in the Wardour hoard is not unusual. This axe type is known from hoards found predominantly in Dorset (Blandford, no. 211, and Sixpenny Handley, no. 610-617), but also in the Bristol area (King's Weston Down, no. 56) and in Wiltshire (Salisbury, no.1066). Blandford axes are known to occur in association with Portland axes and small, thinly cast, high-tin gouges which were, like Portland and Blandford axes, deposited in as-cast condition. While there may have been less than five gouges of this type included in the Salisbury hoard (Stead 1998, pl. 3 and 6), there were eight specimens in the Vale of Wardour hoard (/40\, /40a\, /42\, /44\, /55\, /56\, /71\, /82\) which is the largest number encountered in an Early Iron Age hoard so far. Like Portland and Blandford type axes, they have never been found singly but always in association with other Portland or Blandford axes. Even though none of these gouges have been metallurgically analysed so far, their silvery patina and as-cast condition suggests that they were made using the same technique that was used for casting Portland and Blandford axes. Apart from these Late Bronze and Early Iron Age socketed axes and gouges,

the bulk of the Vale of Wardour hoard contains artefacts like palstaves, rapier- and sword fragments and spearheads which all date from the Middle and Late Bronze Age. Furthermore, there are also a small number of artefacts which are part of the Llyn Fawr metalwork assemblage dating from the Earliest Iron Age. The latest artefacts in this hoard are likely to be the two unidentified objects which resemble pommels of Early Iron Age dagger hilts, nos. /69\ and /93\ (Ben Roberts pers. comm.). The thinner, more fragile-looking object (/93\) finds an almost exact, albeit more complete, parallel in the Salisbury/Netherhampton hoard (1998.0901.202/British Museum database no. 509; Stead 1998, pl. 5), which it has been catalogued as 'copper alloy multi-armed ornament with one disc-ended arm'. Both objects have a central bar terminating in a small more or less concave disc at the top and two arms curving outwards from the bottoms. The two arms are broken but probably went on to curve all the way around, their ends possibly touching the rim of the central disc. These objects resemble the hilt terminals/pommels of Continental Early Iron Age (Hallstatt D) antenna-hilted daggers. This dagger type, represented at the eponymous Hallstatt cemetery in graves 13/1939 (Kromer 1959, Tafel 210, 9), 11/1889 (ibid, Tafel 205, 5a), 32/1939 (ibid, Tafel 205, 2a) and 702/1 (ibid, Tafel 143) is a typical find in Continental Early Iron Age contexts but they are considerably rarer in Britain. It looks very different from object /93\, but there is a chance that this, too, is the hilt fragment of a contemporary antenna-hilted dagger, although probably of a different type. The British Museum Catalogue of 1953 shows an anthropoid dagger with an iron blade and bronze hilt which shows similar characteristics (BM Catalogue 1953, 58, fig. 22, 4), although the V-shaped arms or 'guard' of this dagger's hilt are wider apart and not as narrow. However, even though the artefacts are certainly contemporary with (or slightly later than) the other Early Iron Age objects in the hoard, their identification needs further investigation and verification. Another artefact type that occurs in the Vale of Wardour hoard (but not in the Salisbury hoard) which is very typical of Continental Early Iron Age Hallstatt C and D contexts are knobbed bracelets. On the Continent, they frequently occur in grave assemblages, both larger and smaller varieties with differently-sized knops and bosses. In Britain, however, knobbed bracelets are generally rare. Looking at the Wardour hoard's fragment's hinged link and dowel attachment, the best parallel may be the well-known 'Clynnog collar' from Hendre Bach, Clynnog, Caernarvonshire (National Museum Wales: 41.109; Hemp 1931, 354-5; O'Connor 1980, 598). It is a much larger object, but it has a very similar opening/closing and securing mechanism which is otherwise unparalleled amongst the small corpus of knobbed/bossed ornaments of the British Isles. Most of the bracelets and neckrings of the Late Bronze and Early Iron Age have an opening to facilitate wear, but most bracelets are

solid without opening. It has been argued that the Clynnog collar should be dated to the later Iron Age La Tène phase rather than the Hallstatt period, because of its advanced hinge-mechanism and fine craftsmanship (Savory 1976, 26; O'Connor 1980, 259), but the similarity between the knobbed/bossed bracelets of the Hallstatt period is striking. O'Connor suggested that since the collection of knobbed bracelets from Mountbatten (Plymouth, Devon) should be dated to the Early Iron Age, so should be the Clynnog collar, as the bracelets would provide a valid British parallel for it (ibid., 259). However, somewhat more complicated hinge-mechanisms as seen in the Clynnog collar and the fragment from Wardour, are more common in the Early La Tène and British examples come from the Iron Age cemetery of Wetwang Slack on the Yorkshire Wolds (Dent 1982, 444-6, fig. 6). Thus, the most likely date for Wardour's knobbed bracelet or collar fragment would be similar to that of the fragment /69\, late Hallstatt D, since it displays the advanced hinge-mechanism of the La Tène period while still retaining the bossed ornament of the Hallstatt period. While the small bag-shaped chape /94\ is a Late Bronze Age Atlantic type, the winged chape /26\ is another Early Iron Age type that derived from the earlier bag-shaped chapes. Winged chapes occur both in Britain and on the Continent and date from Hallstatt C which makes them older than the dagger and knobbed bracelet/collar fragments discussed above. The winged chape resembles the chapes from the Thames at Wandsworth (British Museum: BM WG 1779) and another, probably from the Thames (British Museum: BM 1875, 4-1, 36), but it has a more V-shaped and less rounded bottom. A very good parallel comes from Tombelle A, Cazevieille (Herault, France) (Inv. Arch. F7; Cowen 1967, fig. 13). Gerloff (after Rieth 1942) suggests that chapes such as this, with straight wings can be assigned to the earliest Iron Age Hallstatt C0 or Hallstatt C1a (Gerloff 2004, 146, fig. 17.9 (no. 10)). An insular type is object /10\, the larger of the two socketed sickle fragments. While the other, /27\, dates from the Late Bronze Age, sickle /10\ is related to the socketed, heeled sickles of the British Early Iron Age. Heeled sickles are known from Early Iron Age hoards, such as Cardiff II and Llyn Fawr (Vale of Glamorgan, Wales), but also as single finds (e.g. Icklingham, Suffolk (British Museum: BM 1904, 10-21, 1) and Southacre, Norfolk (Norwich Castle Museum: NCM 1908.22.34). The three most similar parallels, however, are sickles with conical sockets and come from the Oxford region (Ashmolean Museum: 1993.134), Dores (nr. Inverness: National Museums Scotland: NMS.X.DO29) and Winterbourne Monkton (Wiltshire: Devizes Museum: D.M.1124). The socketed sickle from Winterbourne Monkton is probably the closest parallel stylistically and geographically, even though it has a small loop at the back of the socket and it lacks the Wardour sickle's midrib on the curved blade. According to Fox, non-heeled socketed sickles with conical

sockets such as fragment /10\, slightly predate heeled socketed sickles (Fox 1939, 223) and it may be suggested here that /10\ dates from the Late Bronze Age-Early Iron Age transition period rather than to the Early Iron Age.

- **1388. Copper alloy socketed axe**
  - **Type:** Blandford
  - **LE:** 103.49mm
  - **WI (cutting edge):** 54.95mm
  - **WI (socket, outer):** 32.87mm
  - **LE (socket, back-front, outer):** 35.24mm
  - **WE:** 158.44g
  - **Description:** Cast copper alloy socketed looped axe, probably of Blandford type. Side-looped, high tin, four ribs on each face, double mouth moulding, straight triangular blade, casting flashes prominent. These axes are characteristically cast with a high-tin content and have a very shiny silvery surface, probably due to an enrichment in eutectoid during casting by the so called tin-sweat phenomenon.
- **1389. Copper alloy socketed axe**
  - **Type:** Blandford
  - **LE:** 96.95mm
  - **WI (cutting edge):** 49.99mm
  - **WI (socket, outer):** 30.76mm
  - **LE (socket, back-front, outer):** 31.24mm
  - **WE:** 146.7g
  - **Description:** Cast copper alloy socketed looped axe, probably of Blandford type, similar to last. Side-looped, two ribs only visible on one face (other face obscured by concretion), single mouth moulding, straight triangular blade, casting flashes prominent. These axes are characteristically cast with a high-tin content and have a very shiny silvery surface, probably due to an enrichment in eutectoid during casting by the so called tin-sweat phenomenon.
- **1390. Copper alloy socketed axe**
  - **Type:** Sompting, Tower Hill variant
  - **LE:** 106.41mm
  - **WI (cutting edge):** 56.72mm
  - **WI (socket, outer):** 36.63mm
  - **LE (socket, back-front, outer):** 36.11mm
  - **WE:** 300+g
  - **Description:** Cast copper alloy socketed looped axe, probably of Sompting type, Tower Hill variant. Side-looped, single mouth moulding, straight body flaring to curved cutting edge, casting flashes prominent. Undecorated with a subrectangular mouth moulding; related in size and shape to an equally smallish Sompting type axe recovered at the Early Iron Age

pyre/feasting site at Llanmaes, Vale of Glamorgan (nos. 1402-1404). Other parallels come from the Falls of Snowdon (nos. 1287) and Lochgair, Argyllshire (no. 1248).

- **1391. Copper alloy socketed axe**
  - **Type:** unknown
  - **LE:** 52.56mm
  - **WI (cutting edge):** 33.72mm
  - **WI (socket, outer):** 23.95mm
  - **LE (socket, back-front, outer):** 20.74mm
  - **WE:** 54.29g
  - **Description:** Late Bronze Age or Early Iron Age socketed axe with flat hexagonal cross-section, small with single loop on one face only, single mouth moulding, side facetted below mouth moulding, triangular body with straight cutting edge, damage at one corner, casting flashes prominent. The loop on one of the faces rather than its side suggests a possible use as a pendant.
- **1392. Copper alloy socketed axe**
  - **Type:** Armorican, Couville variant
  - **LE:** 78.72mm
  - **WI (cutting edge):** 30.11mm
  - **WI (socket, inner-outer):** 22.77mm
  - **LE (socket, back-front, inner-outer):** 25.9mm
  - **WE:** 100.11g
  - **Description:** Small cast copper alloy socketed looped axe of Late Bronze or Early Iron Age type, possibly Armorican type, Couville variant. Side-looped, single mouth moulding, body flares gently to straight triangular cutting edge, casting flashes prominent on loop side only. The axe is similar to two single finds from Topcliffe (no. 1241) and the Settle Area (no. 1238), both North Yorkshire
  - **Note:** After having been examined under the Treasure Act of 1996 (Amendment 2002) it has now been acquired by Salisbury Museum.
  - **References:** Treasure Reference Number: 2011T684; Portable Antiquities Scheme Finds ID: WILT-E8DA70.
  - **London:** Salisbury Museum.
  - **Plate 141-143**

1393. Preston Capes, Northamptonshire (SP5656854008)

- **Copper alloy socketed axe**
- **Type:** Sompting, Kingston variant
- **LE:** 13,5cm
- **WI (cutting edge):** 5,5cm
- **Description:** Very worn cast copper alloy socketed looped axe. The axe is in poor condition and requires conservation. The axe is

complete, but some of the blade looks worn away, possibly by wear and re-sharpening. The surface shows large patches of corrosion and much of the decoration is worn away. The axe has a double-mouth moulding with a thicker upper and thinner lower mouth moulding. The casting seams at the top and along the sides are still visible and comparatively prominent. The socket/mouth moulding is sub-rectangular or back-to-front in shape and the upper edge looks worn. The decoration on both faces seems to be the same: there is a large pellet-in-two circlets just below the lower mouth moulding with two more below it, towards the centre of the axe's body. The surface around the circlets is very worn, but it seems as if the outer circlets were connected by ribs, possibly two ribs connecting the upper corners of the faces with the lower circlets and possibly ribs connecting the lower circlets with the central circlet at the top. However, the surface is too worn to be certain.

- **References:** Portable Antiquities Scheme database: www.finds.org.uk: Find ID: LANCUM-563E82
- **Returned to finder**
- **Plate 144**

Add: 1394. Rookley Farm/Houghton Down Farm, Stockbridge, Hampshire (SU33153515)

- **Copper alloy socketed axe**
- **Type:** Sompting, Figheldean Down variant
- **LE:** 13,8cm
- **WI (cutting edge):** 5,6cm
- **WI (socket, inner-outer):** 3,2-4cm
- **LE (socket, back-front, inner-outer):** 3-3,9cm
- **WE:** 479.9g
- **Description:** Cast copper alloy socketed looped axe in as-cast condition. The cutting edge was neither used nor sharpened but the casting seams were smoothed down and the axe feels smooth to the touch. It has a square double-mouth moulding and a casting flaw on the reverse, just above the first rib, between the two mouth mouldings. The surface colour is dark olive green with patches of turquoise and flecks of white and orange. The axe is decorated with three plain ribs on each side, more or less evenly spaced. The sides of the axe are almost parallel making the cutting edge narrow.
- **Note:** This axe was made in the same mould or from the same template as seven of the axes from the Figheldean Down Hoard (Tilshead, Wiltshire, nos. 1033-1036, 1043, 1045 and 1048) and the large, heavy axe from the Salisbury Hoard (Netherhampton, Wiltshire, no. 1096). They all share an identical flaw on the reverse: a slightly misshapen mouth moulding, a flaw just above the first of the three ribs, between the two mouth mouldings. The mould may have been cracked or missing a small piece resulting

in some superfluous metal being deposited between the two mouth mouldings.
- **References:** www.finds.org.uk/database: HAMP1871
- **Returned to finder/kept at farm where it was found.**
- **Plates 144 and 145**

Add: 1395-1397. Ulverston, Cumbria (SD26757535)
- **Axe hoard**
- **Three copper alloy socketed axes**
- **1395.**
  - **Type:** Sompting, Kingston variant
  - **LE:** 13.5cm
  - **WI (cutting edge):** 6.65cm
  - **WI (socket, inner-outer):** 2.9-3.75cm
  - **LE (socket, back-front, inner-outer):** 3-4.15cm
  - **WE:** 333g
  - **Description:** Cast copper alloy socketed looped axe with long wedge-shaped body, somewhat splayed blade and back-to-front mouth moulding. The axe is complete and in good condition. It has a very smooth dark brown patina on both sides with some pitting in the upper and middle part of the body as well as larger patches of corrosion and some active bronze disease. The surface is smooth to the touch and the axe shows definite signs of wear: the casting seams were removed from the sides, blade and mouth and the blade was sharpened. Striations from sharpening and re-sharpening are clearly visible running parallel to the blade. The act of shaping and sharpening of the blade probably removed the above-mentioned surface pitting which is still clearly visible in the middle and upper part of the body. The axe has a thick mouth moulding and the socket is 'back-to-front' which means it is rectangular in shape, but not aligned with the blade. Below the thick mouth moulding are two clear decorative mouldings. Both faces are decorated with a clear rib-and-circlet pattern: Two hanging triangles (on the outside) with a single rib in the centre between them, with the rib and the tips of the triangles terminating in three pellets-in-circles.
  - **Note:** Possibly cast in the same mould or made from same mould template as axes nos. 1396 (Ulverston, Cumbria), 193 (Skelmore Heads, Cumbria) and 1245 (Dunnichen, Tayside)
  - **Reference:** www.finds.org.uk: LANCUM- 3F7550
  - **Plate 147**
- **1396.**
  - **Type:** Sompting, Kingston variant
  - **LE:** 13.3cm
  - **WI (cutting edge):** 6.2cm

- **WI (socket, inner-outer):** 2.9-3.7cm
- **LE (socket, back-front, inner-outer):** 3.2-4.55cm
- **WE:** 378g
- **Description:** Heavy cast copper- (and/or high-tin-) alloy looped socketed axe with long wedge-shaped body, somewhat splayed blade and back-to-front mouth moulding. The axe is complete and in reasonable condition. It has a very rough surface on both sides with a dull silvery-grey patina shining through patches of corrosion and active bronze disease. The surfaces of the sides are especially rough and it seems that here, some of the original silvery surface has been replaced by corrosion and bronze disease. The axe shows no signs of wear at all; it is in as-cast condition. The casting seams are not very pronounced (except for around the mouth where they are very pronounced), but they are still intact. The blade has not been hammered, shaped or sharpened and it is still c. 5-6mm thick with the casting seam running along the centre. The axe has a thick mouth moulding and the socket is 'back-to-front' which means it is rectangular in shape, but not aligned with the blade. Below the thick mouth moulding may have possibly been another, shallower moulding, but this has been nearly obliterated by the surface corrosion. Both faces are decorated with the same rib-and-circlet pattern that is display by axe no. 1: Two hanging triangles (on the outside) with a single rib in the centre between them, with the rib and the tips of the triangles terminating in three pellets-in-circles.
- **Note:** Possibly cast in the same mould or made from same mould template as axes nos. 1395 (Ulverston, Cumbria), 193 (Skelmore Heads, Cumbria) and 1245 (Dunnichen, Tayside)
- **Reference:** www.finds.org.uk: LANCUM- 3F84C4
- **Plates 106 and 146**

- **1397.**
  - **Type:** Sompting, Tower Hill variant
  - **LE:** 8.49cm
  - **WI (cutting edge):** 6.19cm
  - **WI (socket, inner-outer):** 2.3-3.4cm
  - **LE (socket, back-front, inner-outer):** 2.4-3.2cm
  - **WE:** 202g
  - **Description:** Cast copper alloy looped socketed axe with short, stocky body and widely splayed blade with curled up corners. The axe is complete and in poor condition. It has an extremely rough surface and it seems that none of the original surface survives. Only in the upper part of the axe, in a few very small spot, the original patina still shines through. It may possibly be of dark brown/golden

colour. However, the major part of the axe's surface shows active bronze disease and corrosion. The axe has a sub-rectangular (back-to-front) or square mouth with a thicker (and slightly miscast) upper mouth moulding and a thinner moulding underneath. The loop is semi-circular in shape. The axe appears to be undecorated.
        - **Reference:** www.finds.org.uk: LANCUM- 3F83A0
        - **Plate 147**
    - **Barrow-in-Furness:** Donated to the people of Furness by the finder and landowner; on display at the Dock Museum, Barrow-in-Furness.
    - **Plates 106, 146 and 147**

Add: 1398. Mam Tor, Derbyshire (SK127836) –

- **Cast lead-alloy socketed axe**
- **Hillfort site**
- **Site:** Most of the finds from Mam Tor were ceramic (mainly of coarse vessels, buckets and globular pots). The smaller finds included flints, a stone axe, a whetstone, a shale bracelet and a cast lead-alloy socketed axe fragment from platform 4.
- **Description:** It is a much corroded fragment of one of the faces, but it seems to be one narrow form and decorated with three long ribs. These features are unusual for Yorkshire type or other ribbed Late Bronze Age socketed axe type. They are more common among the Early Iron Age corpus of socketed axes of Sompting type, Cardiff II or Figheldean Down variants.
- **Notes:** The site also produced two radio-carbon dates: 3130+/-132BP, cal. 1180bc (Birm-202, from platform 2) and 3080+/-115BP, cal. 1130bc (Birm-192, from platform 3), which seem to be too early for the Late Bronze Age/Early Iron Age transitional character of the site. Coombs and Thompson quote Coles and Jones who suggest that wood from aged trees could explain the anomaly (Coombs and Thompson 1979, 44).
- **References:**
    - Coombs and Thompson 1979, 7-52.
    - Guilbert 1996, 12-18.
- **Location:** Unknown.

Add: 1399.-1401. Preston Down, Jordan Hill, Weymouth, Dorset (SY699824)

- **Prehistoric site/possibly settlement site**
- **Description:** The finds from this site were almost exclusively chance finds made over a period of years. They include a socketed axe (see below), two bronze spearheads, a copper alloy pin and a penannular armlet with sub-rectangular cross-section.
- **1399-1401. Copper alloy axe(s):**
    - **Type:** Portland
    - **Description:** Cast copper alloy socketed looped axes with rib-and-pellet decoration.

        - **Notes:** Moule reports that there were three such socketed axes from Jordan Hill – he described them as matching the ones from Eggardon Hoard (see above) (Moule 1900, 53).
        - **References:**
            - Dunning 1934, 270, fig. 3.3.
            - Moule 1900, 40-105.
            - O'Connor 1980, 598, List 251, no. 2.
            - Pearce 1976, 30.
            - Pearce 1983, 488, no. 487, 489.
    - **Location:** Dorchester: Dorset County Museum and London: British Museum. Socketed axe: Warne collection. Decorated spearhead: DCM 1885/16/4. Swan's neck pin: BM.

Add: 1402. Cold Kitchen Hill, Brixton Deverill, Wiltshire (ST 845 380) –

- **Early Iron Age settlement**
- **Description:** The settlement revealed, apart from Early Iron Age pottery, numerous metal artefacts of bronze and iron, e.g. brooches, chains, tweezers, knives and pins. Most of the material is dates from the later Iron Age (La Tène), but few finds come of the Early Iron Age occupation, most importantly the early iron socketed axehead, ring-headed pins and the bracelet fragment.
- **Iron socketed axe**
    - **Type:** Earliest Iron Axe
    - **Notes:** Found during excavations in 1925, but stratigraphical position not recorded.
    - **References:**
        - Rainbow 1928, no. 7.
        - Cunnington and Goddard 1934, 119, Pl. XXXIV.
        - Manning and Saunders 1972, 283.
- **Museum:** Devizes.

Add.: 1403. Rahoy, Morvern, Argyll (NM675445 estimate) –

- **Small vitrified fort**
- **Type:** Iron socketed axe
- **Description:** The site was excavated in 1937, but the finds (among them saddle querns, conical iron ferrule, a fragmentary La Tène 1c brooch and an early iron socketed axe) are not securely stratified.
- **LE:** 17,2cm
- **WI (cutting edge):** ca. 6,5cm
- **WI (socket, inner-outer):** ca. 4,5-5,7cm
- **LE (socket, back-front, outer):** ca. 6cm
- **WE:** 758g
- **Description:** Massive, heavy iron socketed axe. Very corroded and with black patina, but loop still intact. The socket is broken, but otherwise the axe is complete. Unlike copper

alloy axes, this iron axe's shape is not symmetrical: the cutting edge is slightly curved downwards. No usage or re-sharpening marks visible. The loop was forged separately and then attached.
    - **References:** Manning and Saunders 1972, 285.
    - **Edinburgh:** National Museums of Scotland: NMA (X.HH.421)

Add: 1404. Traprain Law, Midlothian (NT580747)

- **Late Bronze Age/Early Iron Age settlement**
- **Description:** Pottery, tools made from organic material and a rich assemblage of metalwork: socketed axes (and fragments of socketed axes) of Late Bronze Age South Welsh and Meldreth Types (Plate 148) as well as one iron socketed axe (Plate 149), tanged chisel, socketed gouge, sword(?) blade fragments, awls and other small tools (e.g. punches), fragment of a bronze Covesea bracelet, swan's neck and nail-headed pins, mould fragments for socketed axes and swords (Ewart Park), numerous metal fragments, runners and bronze waste.
- **Notes:** Unfortunately little weight can be placed on the stratigraphy of any of the objects from this site as the method of excavation was by a series of arbitrary levels (Manning and Saunders 1972, 286).
- **Iron socketed axe**
    - **LE:** 12,9cm
    - **WI (cutting edge):** 6,2cm
    - **WI (socket, inner-outer):** 4,6-5,9cm
    - **LE (socket, back-front, inner-outer):** 3,8-4,8cm
    - **WE:** 523,7g
    - **Description:** Very heavy iron socketed axe with very flaky surface. It has a dark-grey/black patina and it is shaped like a copper alloy axe. The loop was not forged separately. Also, it has a single large mouth moulding.
    - **Plate 149**
  - **Notes:** Found during the excavations in the lowest level of the site close to the fragmentary remains of a hut associated with Late Bronze Age bronzes and probably a Hallstatt razor.
- **References:**
    - Curle 1915, 139-303.
    - Curle 1920, 54-124.
    - Curle and Cree 1921, 153-207.
    - Cree 1923-24, 241-286.
    - Burley 1955-6, 150, fig. 1, T27.
    - Manning and Saunders 1972, 286.
    - Rainbow 1928, no. 9.
- **Edinburgh:** National Museum of Antiquities: NMA: X.GVM473
- **Plates 148-149**

Add.: 1405.-1407. Llanmaes, Vale of Glamorgan (SS98216963)

- **Late Bronze Age/Early Iron Age midden, settlement or feasting site**
- **Description:** The site is currently being excavated and investigated. So far, it has produced fragments of a Late Bronze Age facetted axe, Armorican axes and also a small sub-type of Sompting type, Tower Hill variant. The other finds are so far unidentified vessel and cauldron fragments which are currently being analysed.
- **References:**
  - Gwilt and Lodwick 2004, 77-81.
  - Gwilt and Lodwick 2005, 91-92.
  - Gwilt, Lodwick and Deacon 2006, 42-48.
  - Gwilt and Lodwick 2007, 78-82
  - Gwilt and Lodwick 2008, 67-69.
  - Gwilt and Lodwick 2009, 29-35.
- **Cardiff:** National Museums and Galleries of Wales
- **Plates 150-152**

Add.: 1408. Shepperton Ranges, Surrey (TQ0676166252) (not mapped or discussed)

- **Copper alloy socketed axe**
- **Type:** Sompting, Tower Hill variant
- **LE:** 100mm
- **WI (blade):** 58.5mm
- **WI (socket, inner-outer):** 29-38mm
- **LE (socket, inner-outer):** 28-38.5mm
- **Weight:** 370g
- **Description:** Cast copper alloy socketed looped axe decorated with three ribs which was found hafted. The haft survives in two parts: the handle and the 'haft-head'. The bronze axe has a large single upper mouth moulding and a spurred loop. Both faces are decorated with three long ribs which are evenly spaced. The cutting edge is curved and show signs of wear and resharpening. The blade tips are blunt: they were deliberately blunted by hammering. Casting flashes have been removed, but crudely.
- **References:** Needham 2009, 46-48.

Add.: 1409. Ham Hill, North Gully, Somerset (ST479172) –

- **Settlement site**
- **Type:** Stone mould
- **Description:** Socketed gouge, leaf-shaped pegged spearhead, socketed axe with thick collar and three ribs (no. 965), stone moulds for socketed axes and socket fragment of another.
- **Notes:**
  - Pearce's drawing of the complete axe looks very much like a drawing of a Figheldean Down axe (this probably is the axe above, no. 965)

        - **1409.** The stone moulds would appear to be for the production of Llyn Fawr period axes. (Needham *et al.* 1988, 20.)
    - **References:**
        - Jockenhövel 1980, Abb. 2.
        - Pearce 1983, 531, no. 748.
        - Needham *et al.* 1988, 15-21.
    - **Taunton:** Somerset County Museum (31D, 35A, 22B, 22A (Walter Coll. 1901))

Add.: 1410.-12. Tisbury Area, Wiltshire (ST91792924)

- **Mixed Hoard**
- **Type:** Multi-period hoard: Portland and Blandford types
- **Description:** Artefacts from a small dispersed base metal hoard, comprising a Middle Bronze Age side-looped socketed spearhead (in two pieces), an incomplete socketed gouge, an awl and three fragments of possibly up to three socketed axes.
- **1410: Socketed axe fragment**
    - **Type:** Blandford
    - **LE (fragment):** 42.2mm
    - **WI (fragment):** 23.45mm
    - **Thickness (fragment):** 2.64mm
    - **Weight:** 14.58g
    - **Description:** Small body fragment of a cast copper alloy socketed looped axe with ribbed decoration. The fragment comes from the upper part of the axe, consisting of part of one face and part of one side. The fragment shows two prominent ribs flanking the long edge of the face, with possibly the worn remains of another towards the inside of the face. Its surface is corroded and of dark grey-greenish colour.
- **1411: Socketed axe fragment**
    - **Type:** Blandford or Portland
    - **LE (fragment):** 24.19mm
    - **WI (fragment):** 19.79mm
    - **Thickness:** 4.48mm
    - **Weight:** 6.43g
    - **Description:** Small mouth fragment of a cast copper alloy socketed looped axe, consisting of part of the mouth and body. The mouth moulding is flanked by a rib below. The part of body below this rib consists of a corner (part face, part side). The surface shows only little corrosion and has a silvery sheen.
- **1412: Socketed axe fragment**
    - **Type:** Undetermined; probably Blandford or Portland
    - **LE (fragment):** 13.29mm
    - **WI (fragment):** 12.09mm
    - **Thickness:** 3.98mm
    - **Weight:** 2.12g

        - **Description:** Fragment of a cast copper alloy looped socketed axe, retaining part of the mouth moulding and showing a prominent casting flash.
    - **References:** Portable Antiquities Scheme database www.finds.org.uk: WILT-0594F7; Treasure Case tracking number: 2010T647.
    - **Location:** Returned to finder after Treasure inquest and conclusion of Treasure proceedings.

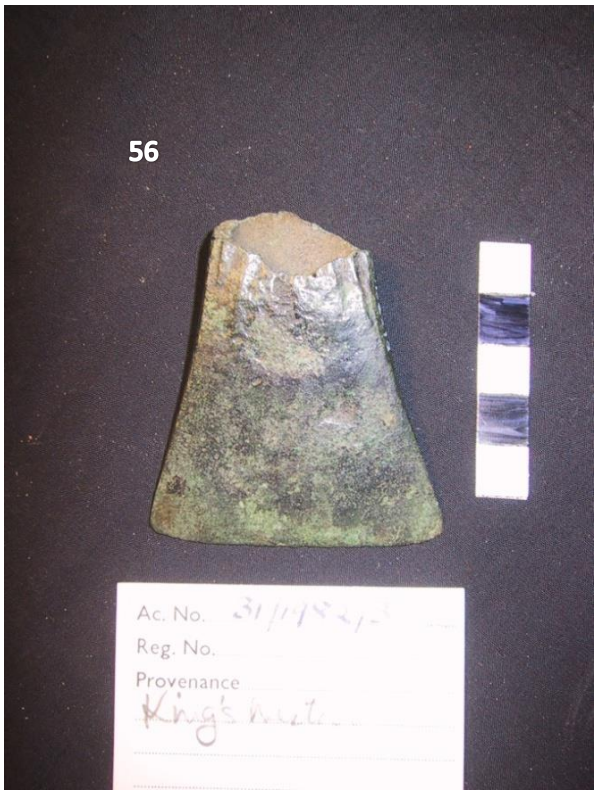
Dunstable (Bedfordshire): *Linear-decorated type* (no. 52: single find, reverse)

Kings Weston Down (Bristol): *Transitional type* (no. 54: part of Kings Weston Down Hoard, obverse (left); reverse (right))

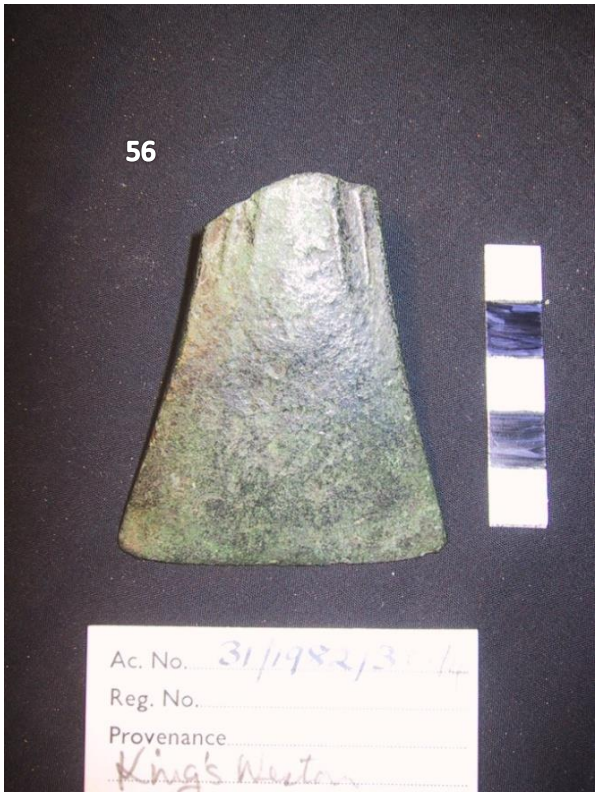
Kings Weston Down Hoard (Bristol): *Transitional* (nos. 54-73)

Kings Weston Down (Bristol): *Transitional type* (no. 55: part of Kings West Down Hoard, obverse)

Kings Weston Down (Bristol): *Transitional type* (no. 55: part of Kings Weston Down Hoard, reverse)



Kings Weston Down (Bristol): *Blandford type* (no. 56: part of Kings Weston Down Hoard, obverse)



Kings Weston Down (Bristol*): Blandford type* (no. 56: part of Kings Weston Down Hoard reverse)

Kings Weston Down (Bristol): *uncertain type* (no. 57: part of Kings Weston Down Hoard, obverse)

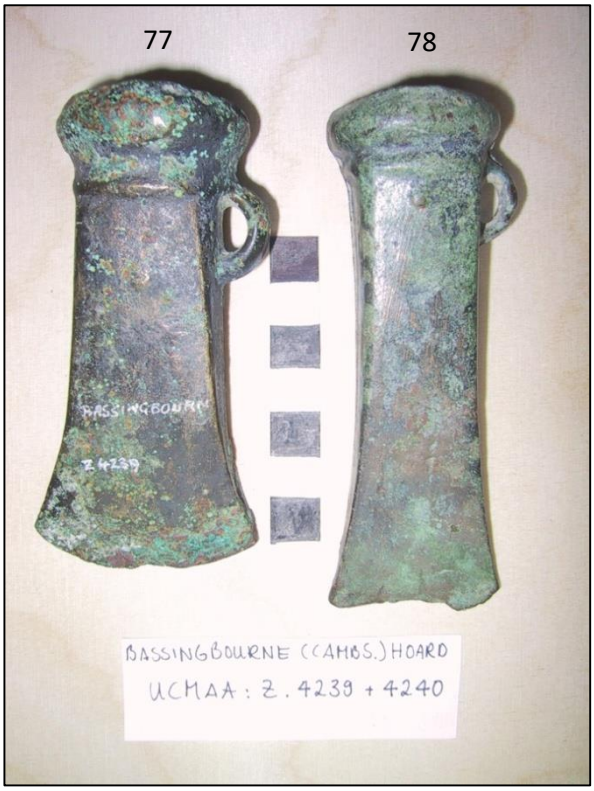
Kings Weston Down (Bristol): *uncertain type* (part of Kings Weston Down Hoard, reverse)

Kings Weston Down (Bristol): *uncertain type* (no. 58: part of Kings Weston Down Hoard, obverse)

Kings Weston Down (Bristol): *uncertain type* (no. 58: part of Kings West Down Hoard, reverse)

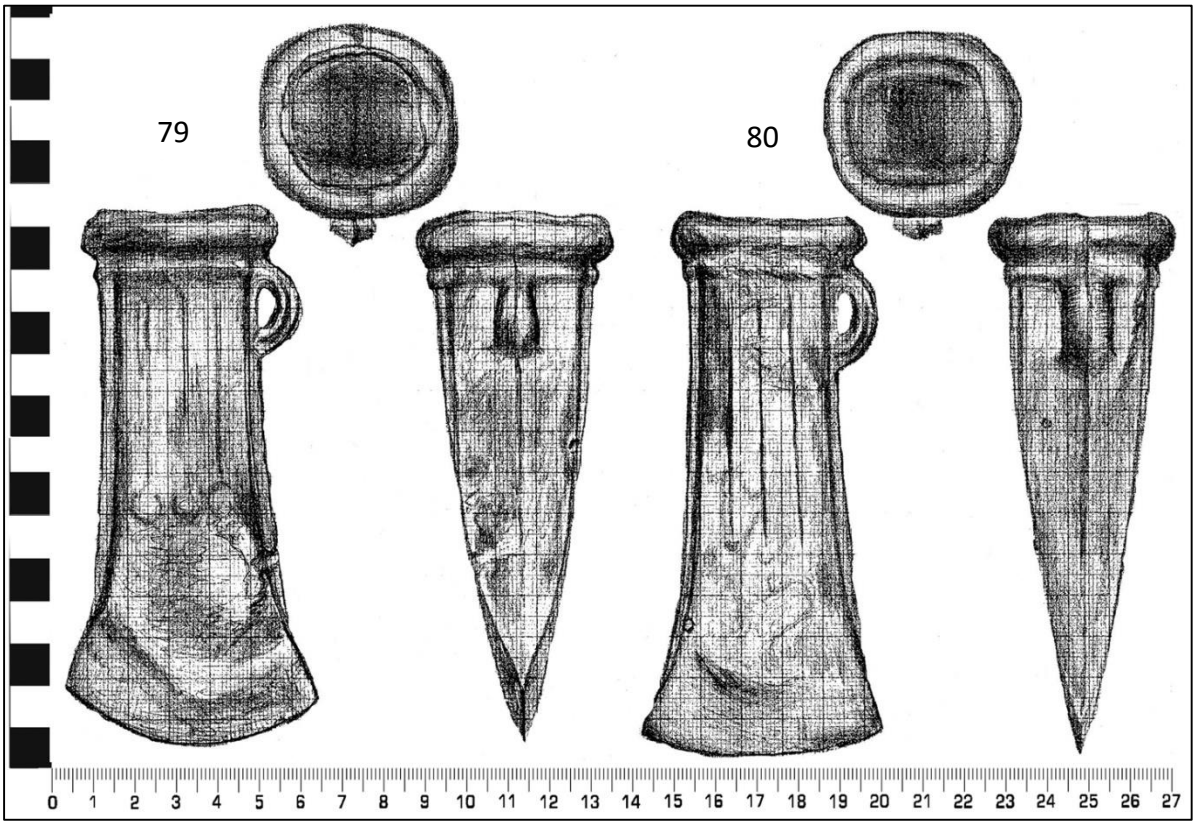
Hotwells (Avon): *Sompting type, Cardiff II variant* (no. 74: obverse, side view, reverse)

Long Crendon (Buckinghamshire): *Transitional type* (no. 75: obverse, reverse)



Bassingbourn Hoard (Cambridgeshire): *Transitional type* (nos. 77+78: obverse)

Bassingbourn Hoard (Cambridgeshire): *Transitional type* (nos. 77+78: reverse)



Quy Fen Hoard (Cambridgeshire): *Sompting type, Cardiff II variant* (nos. 79+80: obverse, view inside socket, side view)

Quy Fen Hoard (Cambridgeshire): *Sompting type, Cardiff II variant* (nos. 79+ 80: obverse, reverse, side view)

Obverse

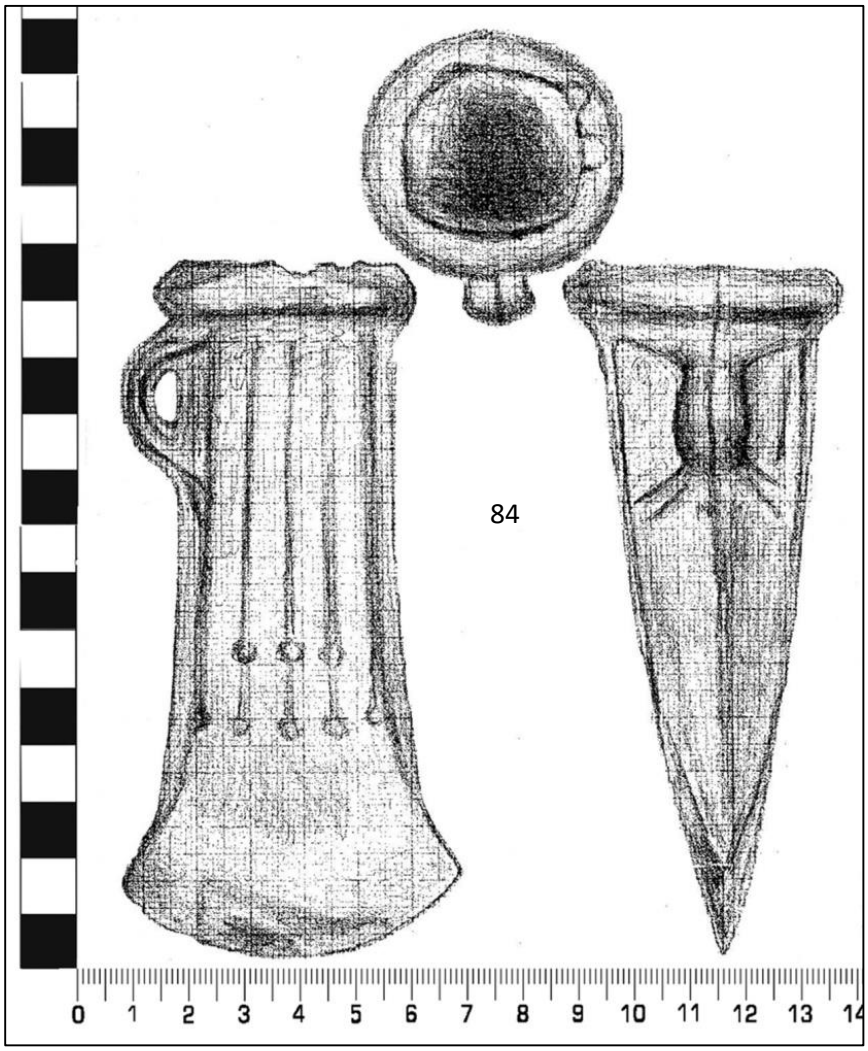
Reverse

Side view

Wicken Fen Hoard (Cambridgeshire): *Linear-Decorated type* (nos. 81-82: obverse)

Wicken Fen Hoard (Cambridgeshire): *Linear-Decorated type* (nos. 81-82: reverse)

Lode (Cambridgeshire)*: Sompting type, Cardiff II variant* (no. 84: reverse, view into socket, side view)

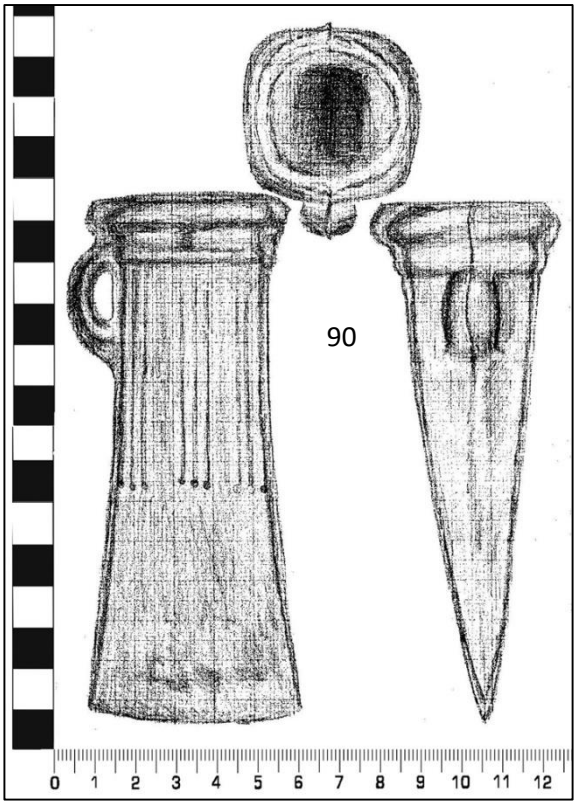


Lode (Cambridgeshire): *Sompting type, Tower Hill variant* (no. 85: obverse, reverse)

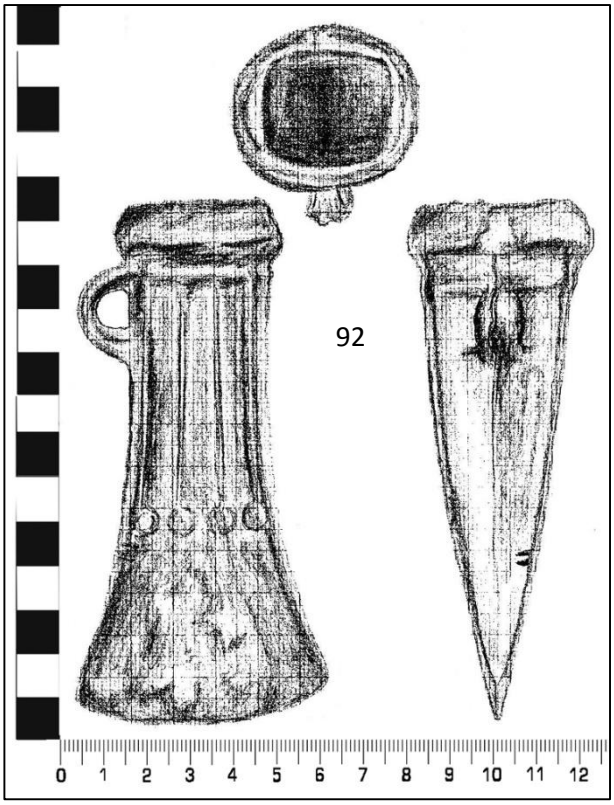
Near Cambridge (Cambridgeshire): *Linear-decorated type* (no. 87: obverse, reverse)

The Fens near Ely (Cambridgeshire): *Linear-decorated type* (no. 88: obverse, reverse)

Fen Ditton (Cambridgeshire): *Sompting type, Cardiff II variant* (no. 90: reverse, view into socket, side view)



Fordham (Cambridgeshire): *Sompting type, Kingston variant* (no. 92: reverse, view into socket, side view)



Fordham (Cambridgeshire): *Sompting type, Kingston variant* (no. 92: obverse, side view, reverse)

Horningsea (Cambridgeshire): *Sompting type, Kingston variant* (no. 93: obverse, side view, reverse)

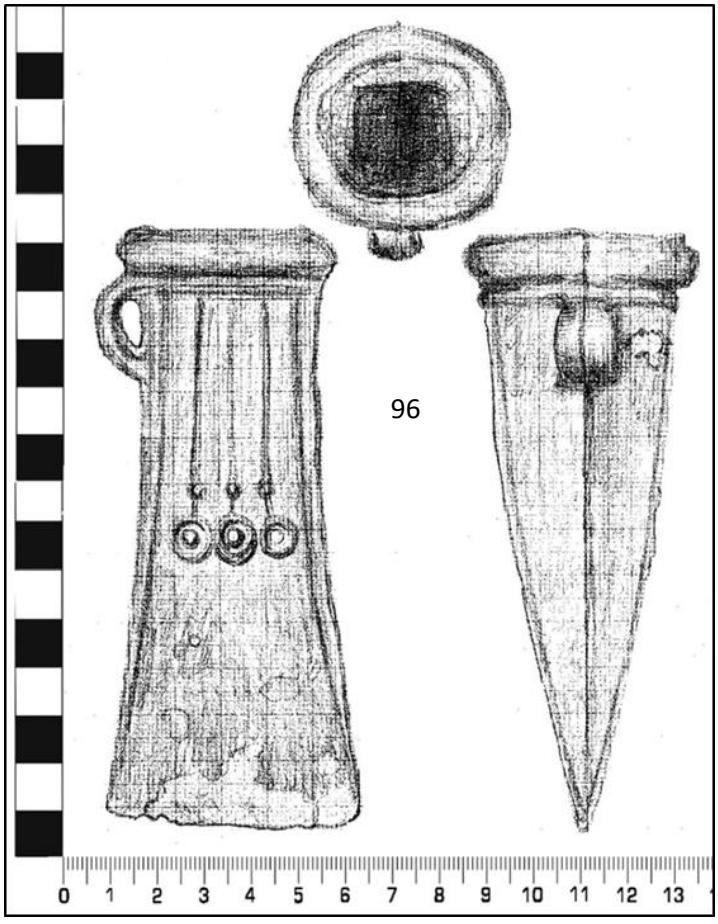
Ely District (Cambridgeshire): *Sompting type, Cardiff II variant* (no. 94: mounted on a modern haft)

Ely District (Cambridgeshire): *Sompting type, Cardiff II variant* (no. 94: detail of obverse)

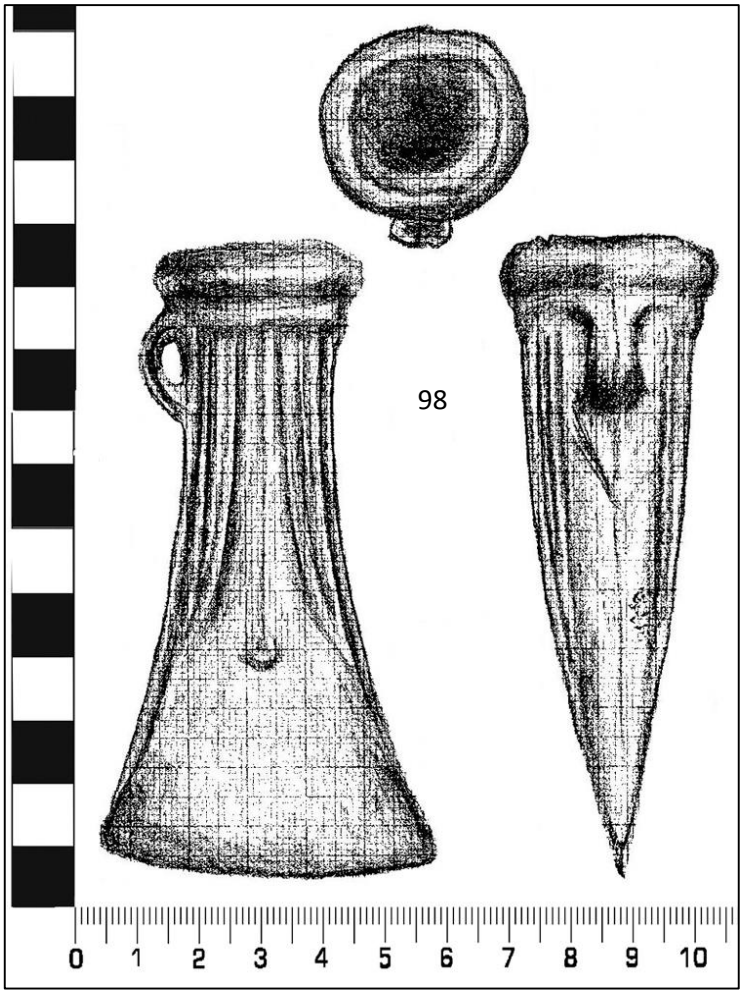
Ely District (Cambridgeshire): *Sompting type Cardiff II variant* (no. 94: detail of reverse)

Littleport Fen (Cambridgeshire): *Sompting type, Kingston variant*
(no. 95: obverse, side view, reverse)

Newton (Cambridgeshire):
Sompting type, Cardiff II variant
(no. 96: reverse, view inside socket, side view)

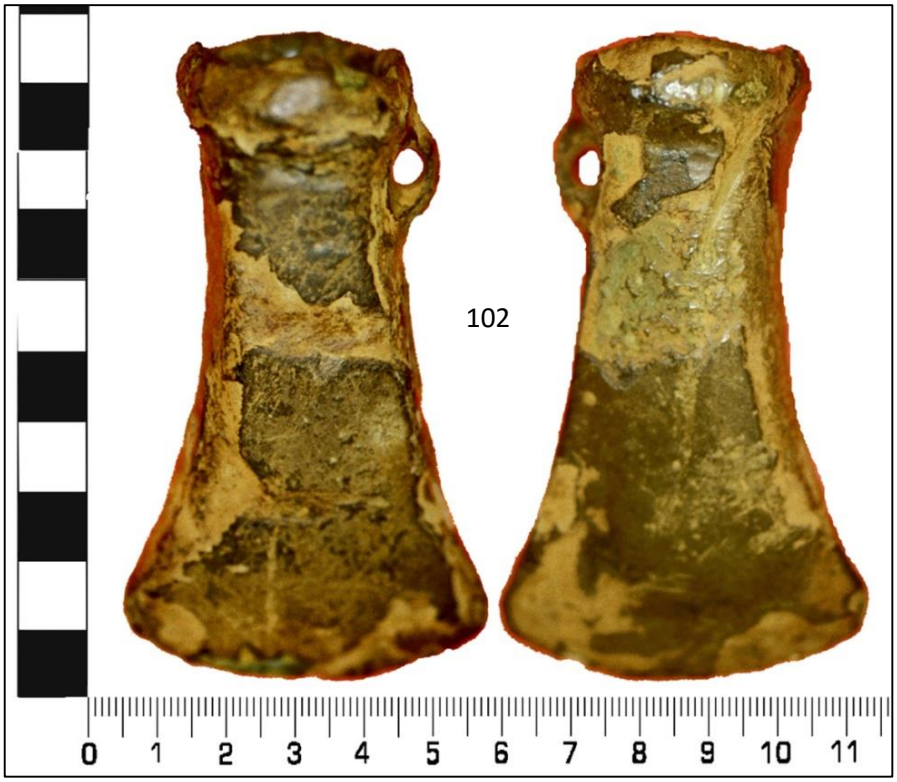


Peterborough, (Cambridgeshire*): Sompting type, Tower Hill variant* (no. 97: obverse, side, reverse)



Reach (Cambridgeshire): *Linear-decorated type* (no. 98: reverse, view inside socket, side)

Reach, (Cambridgeshire): *Linear-decorated type* (no. 98: obverse, reverse)



Faddiley, (Cheshire*): Sompting type, Tower Hill variant* (no. 102: obverse, reverse)

Part of Carn Brea Hoard (Cornwall): *Armorican type* (nos. 103+104: obverse (104), reverse (103))

Part of Carn Brea Hoard (Cornwall): *Armorican type* (nos. 103+104: obverse (103), reverse (104))

Mylor Hoard (Cornwall*):* nos. 147-179+ceramic container (after conservation)

Mylor Hoard (Cornwall): nos. 147-179: during excavation

Mylor Hoard (Cornwall): nos. 147-179: during excavation

Mylor (Cornwall): ceramic container (part of Mylor Hoard, during excavation)

Mylor (Cornwall): *Sompting type, Figheldean Down variant*
(nos. 158, 164, 166+179: part of Mylor Hoard, obverse)

Mylor (Cornwall): *Sompting type, Figheldean Down variant* (nos. 162, 163, 173+175: part of Mylor Hoard, obverse)

Mylor (Cornwall): *Sompting type, Figheldean Down variant* (nos. 159, 170+172), *Sompting/South Welsh type hybrid (no. 171))* (part of Mylor Hoard, obverse)

Mylor (Cornwall): *Sompting type, Figheldean Down Variant*
(nos: 165, 167, 177+178: part of Mylor Hoard, obverse)

Mylor (Cornwall): *Sompting type, Figheldean Down Variant*
(nos. 149, 151, 157+176: part of Mylor Hoard, obverse)

Mylor (Cornwall): *Sompting type, Figheldean Down variant* (154, 159, 168+179: part of Mylor Hoard, obverse)

Mylor (Cornwall): *Sompting type, Figheldean Down variant (nos. 153, 174+147); Sompting/South Welsh hybrid (no. 169)* (part of Mylor Hoard, obverse)

Mylor (Cornwall): *Sompting type, Figheldean Down variant*
(nos. 152, 148, 156+160: part of Mylor Hoard, obverse)

Mylor (Cornwall): *Sompting type, Figheldean Down variant*
(no. 150: part of Mylor Hoard, obverse)

Mylor (Cornwall*): Armorican type* (no. 187: obverse, side view, reverse)

Mylor (Cornwall): *Armorican type* (no. 187: single find, side view, close-up, view inside socket)

Skelmore Heads (Cumbria): *Sompting type, Kingston variant* (no. 193: part of Skelmore Heads Hoard: obverse, side view, reverse)

Skelmore Heads (Cumbria): *Sompting type, Kingston variant* (no. 193: part of Skelmore Heads Hoard: with the root of ash tree that it was found in)

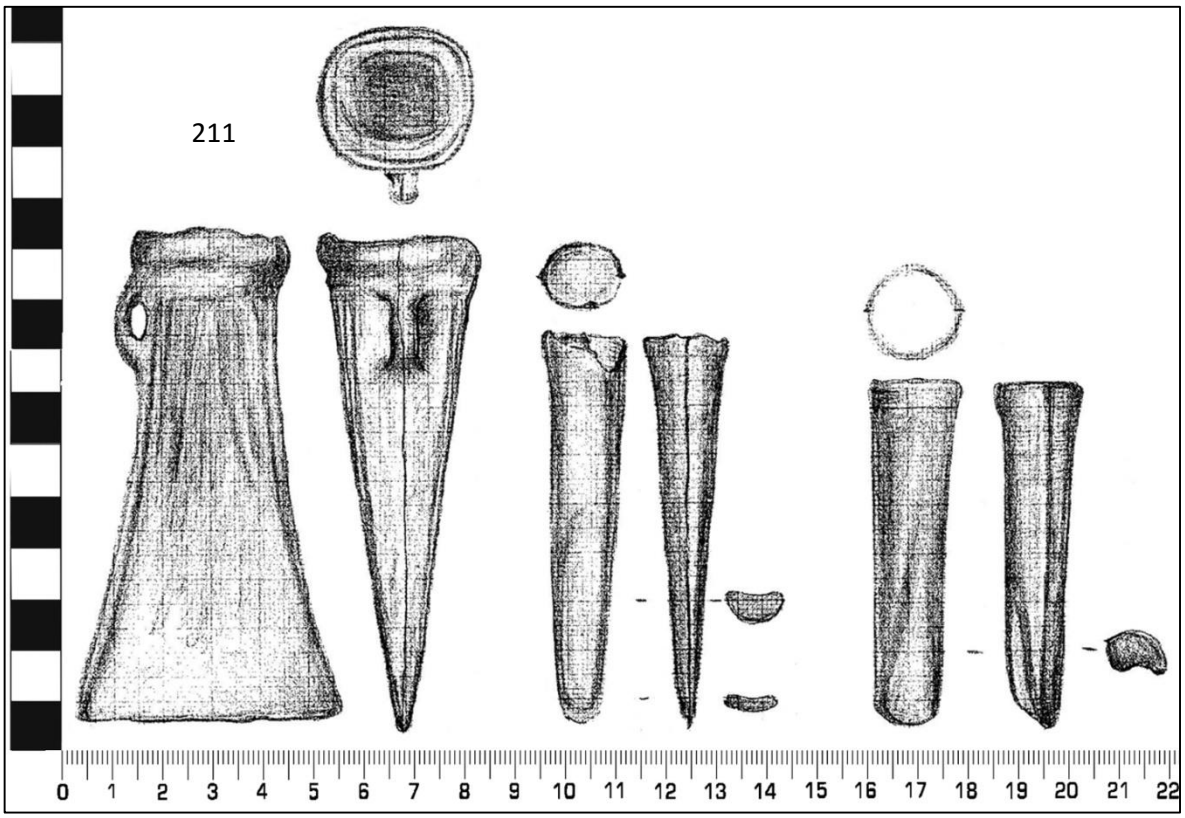
Skelmore Heads (Cumbria): *Sompting type, Tower Hill variant* (no. 197: part of Skelmore Heads Hoard, obverse, side view, reverse)

Ainstable (Cumbria): *Sompting type, Cardiff II variant* (no. 199: obverse, side view, reverse)

Penrith (Cumbria): *Sompting type, Cardiff II variant* (no. 200: obverse, side view, reverse)

Chagford (Devon): *Sompting type, Kingston variant* (no. 204: obverse, side view, reverse)

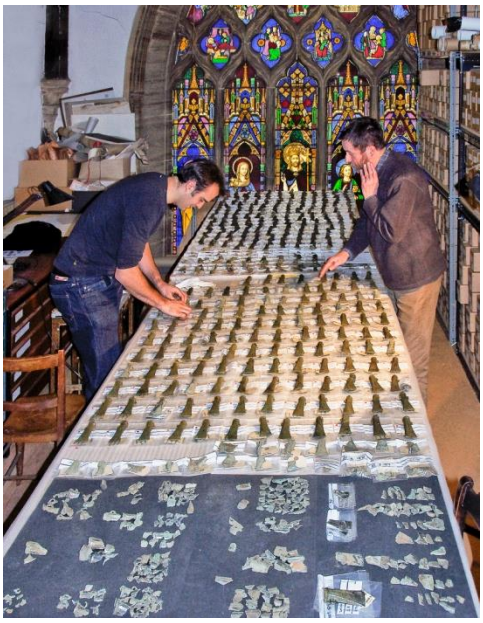
Blandford Hoard (Dorset): *Blandford type* (no. 211: obverse, reverse)



Blandford Hoard (Dorset): *Blandford type* (no. 211: obverse, side view, view into socket)

Langton Matravers Hoard (Dorset): *Portland type* (nos. 226-598: group after excavation)

Langton Matravers (Dorset): *Portland type* (no. 226: part of Langton Matravers Hoard: reverse, obverse)

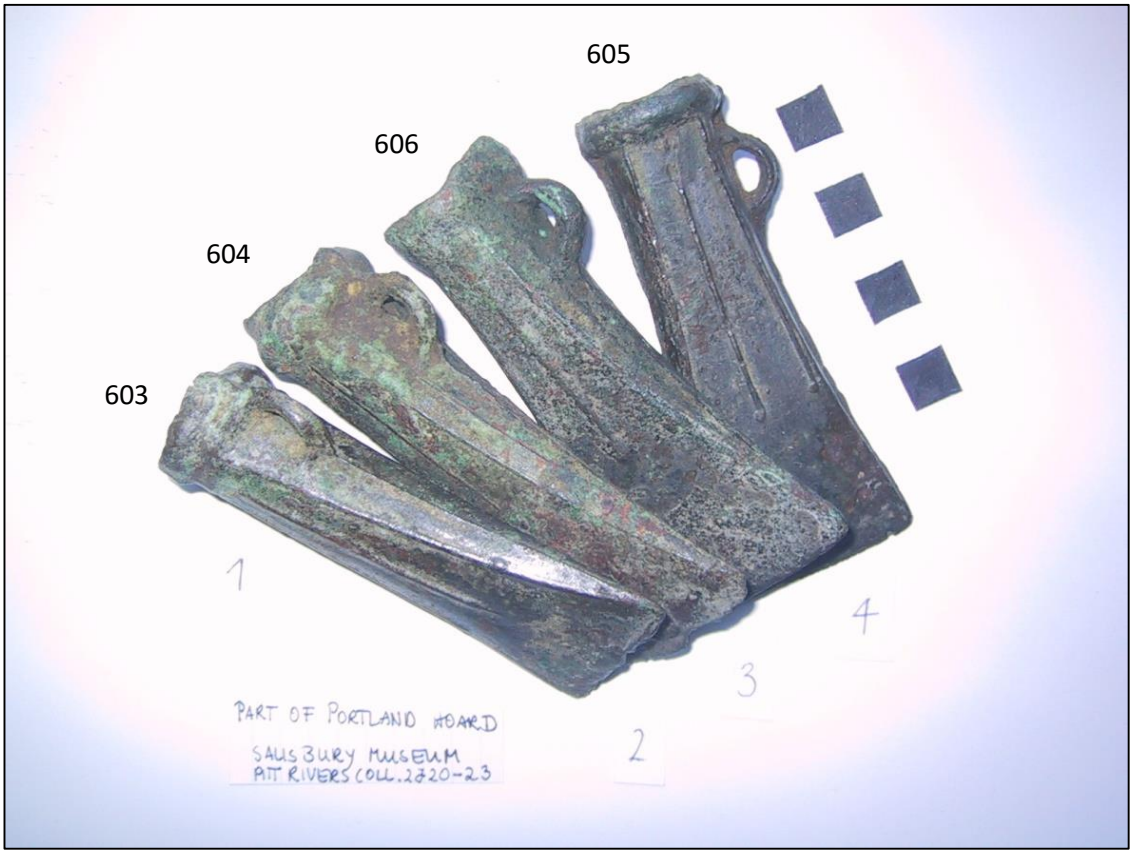


Langton Matravers Hoard (Dorset): (nos. 226-598: Dorset County Mus.)

Portland Hoard (Dorset): *Portland type* (nos. 600-602: obverse, reverse)

Portland Hoard (Dorset): *Portland type* (nos. 603-606: reverse)

Portland Hoard (Dorset): *Portland type* (nos. 603-606: side view, blade detail)

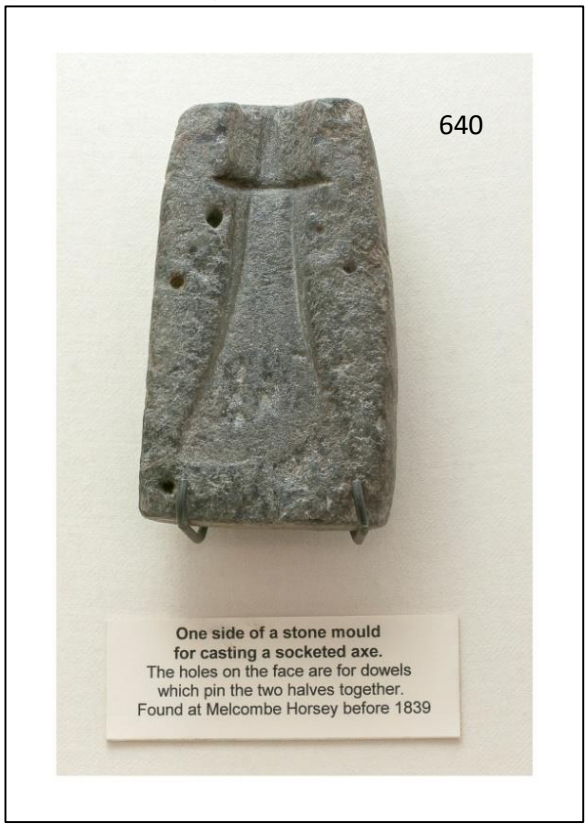


Portland (Dorset): *Portland type* (nos. 603-606: obverse, side view detail)

Portland Hoard (Dorset): *Portland type* (nos. 603-606: side view)

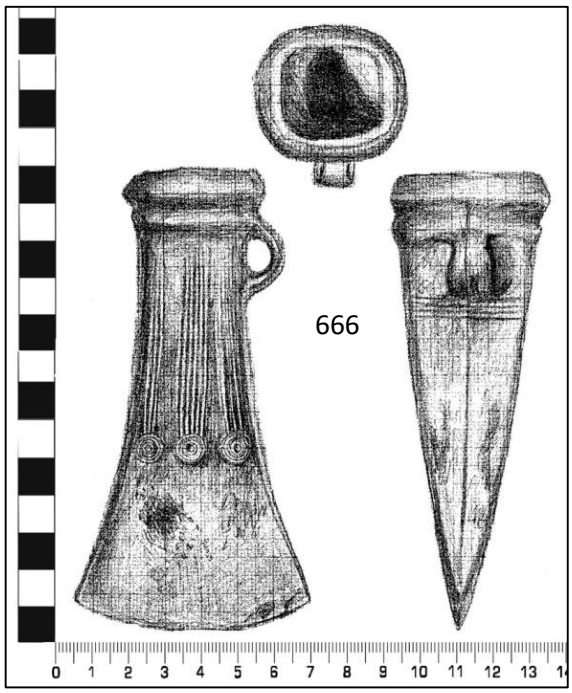
Weymouth Hoard (Dorset): *Portland type* (nos. 636-637: obverse, reverse)

Melcombe Horsey (Dorset): stone mould
(no. 640: obverse)



Wareham (Dorset): *Armorican type*
(no. 643: obverse, reverse)

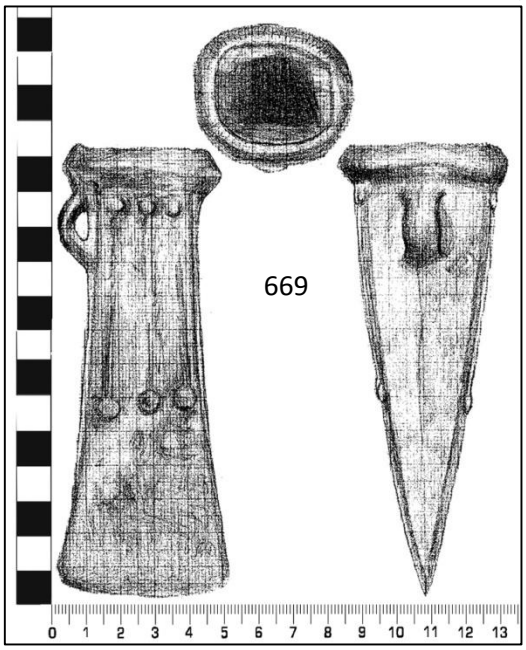
?Dorset, *Portland type* (no. 647: obverse, reverse)

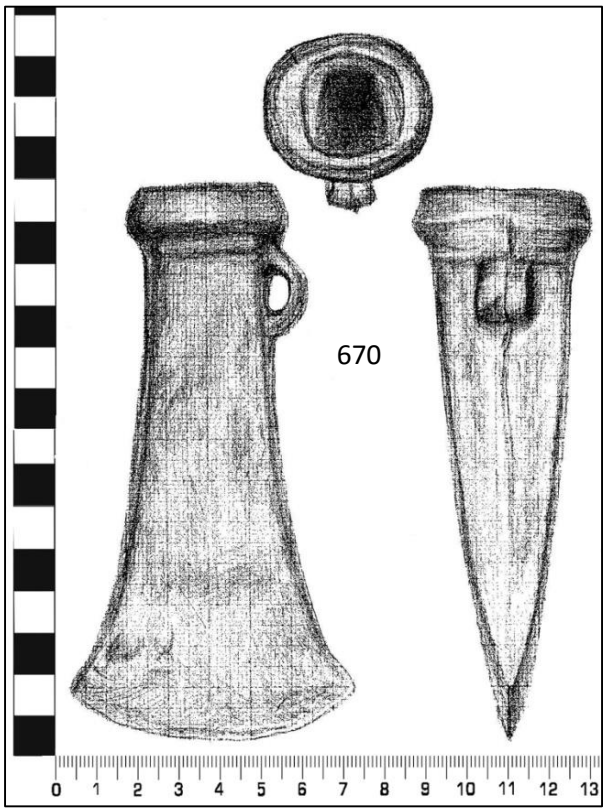


Lea Marshes (London, Essex): *Sompting type, Tower Hill variant* (no. 666: obverse, view into socket, side view)

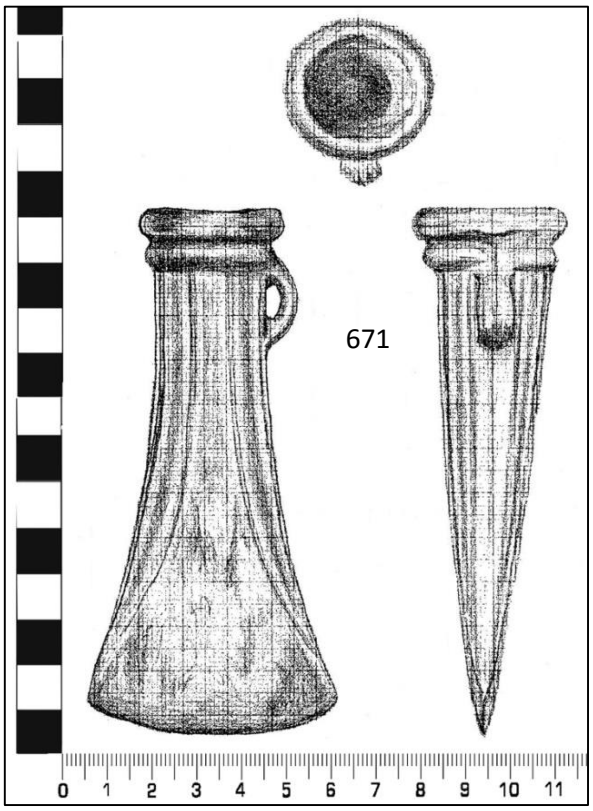
Near Cirencester (Gloucestershire): *Sompting type, Kingston variant* (no. 668: obverse, reverse)

Near Old Kent Rd (London): *Sompting type, Figheldean Down variant* (no. 669: obverse, view into socket, side view)





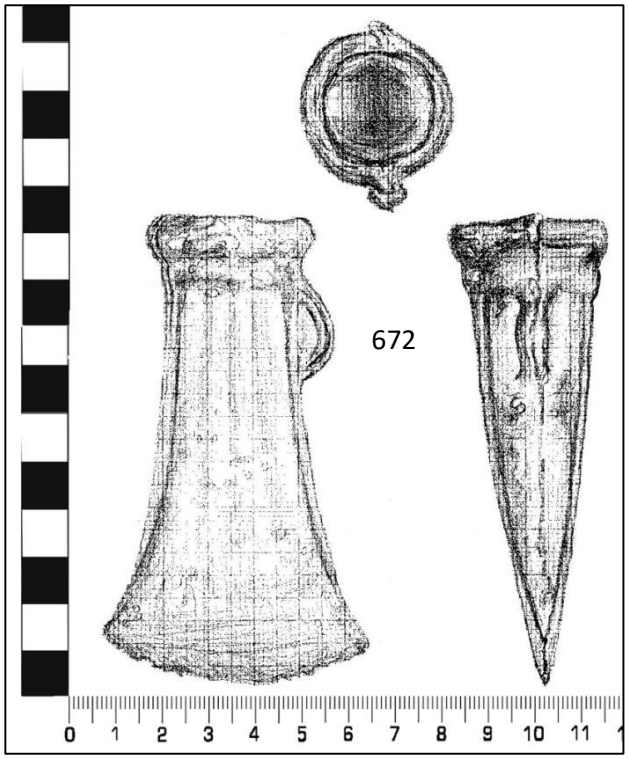
River Thames at Kew (London): *Sompting type, Tower Hill variant* (no. 670: obverse, view into socket, side view)



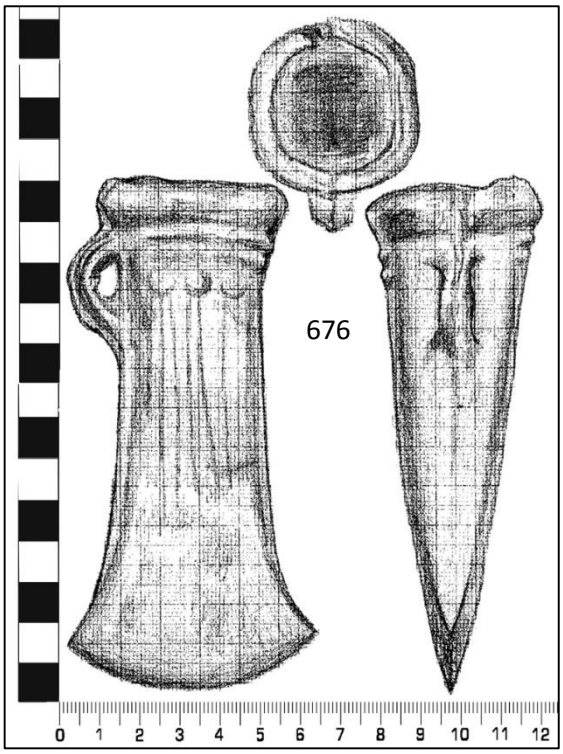
River Thames near Kew (London): *Transitional type (linear-facetted)* (no. 671: obverse, view into socket, side view)

Sunbury (Middlesex): *Transitional type* (no. 672: obverse, side view, reverse)

River Thames at Kew (London) *Transitional (linear-facetted) type* (no. 671: obverse, side view, reverse)



Sunbury (Middlesex): *Transitional type* (no. 672: obverse, view into socket, side view)



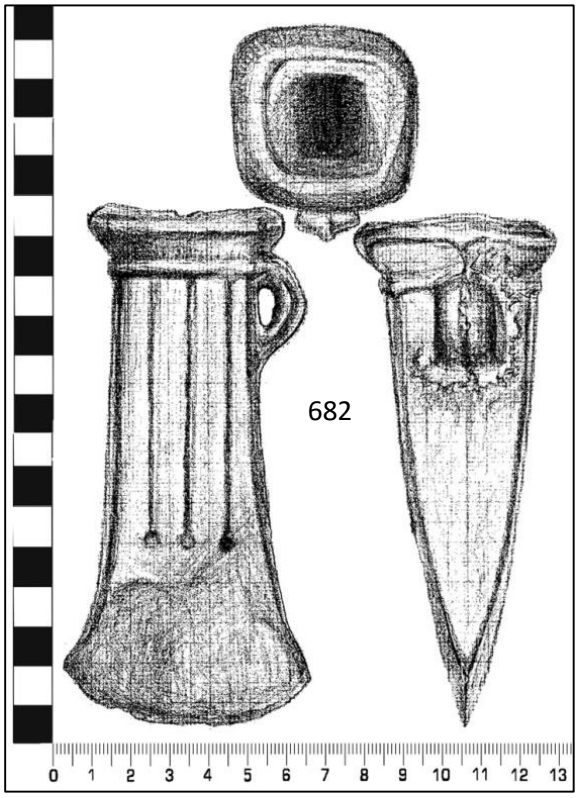
Thames at Hammersmith (London): *Sompting type, Kingston variant* (no. 676: obverse, view into socket, side view)

Thames at Syon Reach (London): *Sompting type, Kingston variant* (no. 677: obverse, view into socket, side view)

Thames at Putney (London): *Sompting type, Cardiff II variant* (no. 681: obverse, reverse)

River Thames at Millbank (London): *Sompting type, Cardiff II variant* (no. 684: obverse, side view, reverse)

River Thames (London): *Sompting type, Cardiff II variant* (no. 682: obverse, view into , socket, side view)



Danebury (Hampshire): *Sompting type Tower Hill/Kingston variants* (nos. 686+687: part of Danebury Hoard, reverse)

Danebury Hoard (Hampshire): *Multi-period hoard* (nos. 686-689)

Danebury (Hampshire): *Sompting type, Tower Hill variant*
(no. 686: part of Danebury Hoard, obverse, side view, reverse)

Danebury (Hampshire): *Sompting type, Tower Hill or Kingston variant*
(no. 687: part of Danebury Hoard, obverse, reverse)

Danebury (Hampshire): *Uncertain type* (no. 688: part of Danebury Hoard, obverse, reverse)

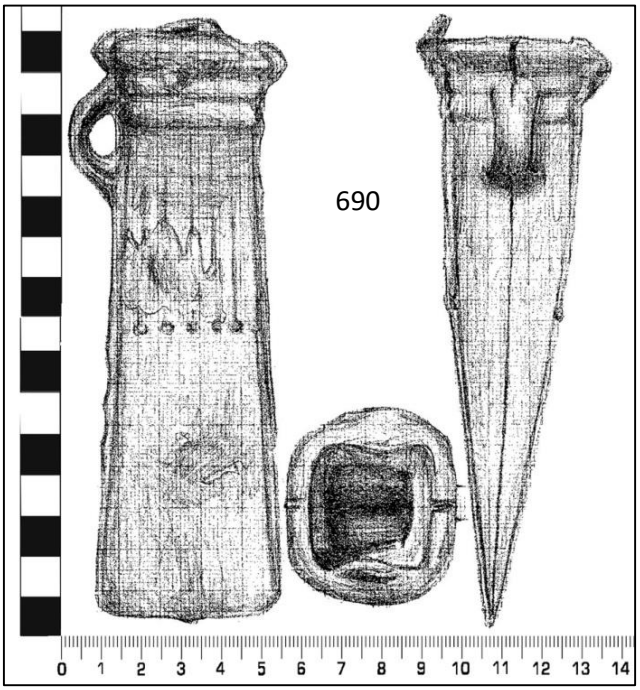
Danebury (Hampshire): *Armorican type* (no. 689: part of Danebury Hoard, obverse, side view, reverse)

Nether Wallop (Hampshire): *Armorican type* (nos. 690-695: part of Nether Wallop Hoard, obverse)

Nether Wallop (Hampshire): *Armorican type* (nos. 690-695: part of Nether Wallop Hoard, reverse)

Nether Wallop (Hampshire): *Armorican type* (nos. 690-695: part of Nether Wallop Hoard, side view)

Nether Wallop (Hampshire): *Armorican type* (no. 690: part of Nether Wallop Hoard, reverse, view into socket, side view)



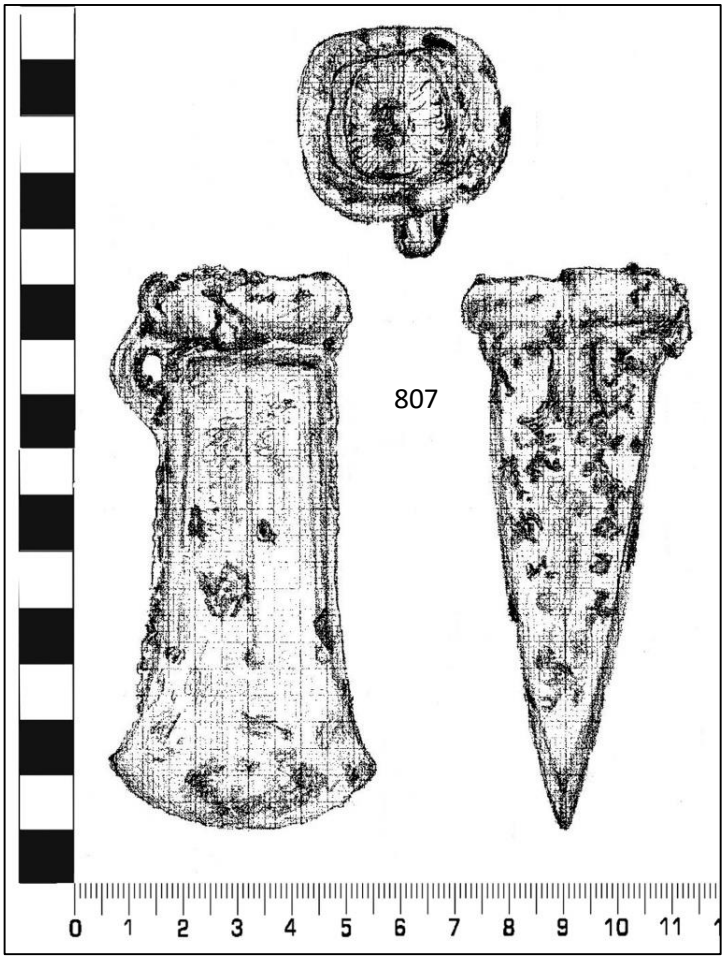
Nether Wallop (Hampshire): *Armorican type* (no. 690: part of Nether Wallop Hoard, obverse, reverse)

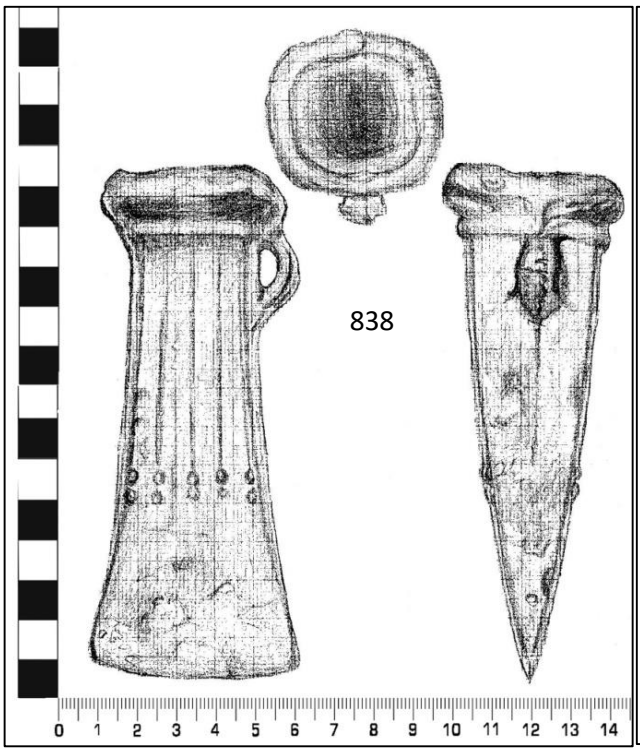
New Forest (Hampshire): *Armorican type* (no. 774a: possibly part of New Forest Hoard, obverse, side view, reverse)

Royston (Hertfordshire): *Sompting type, Tower Hill variant* (no. 774b: obverse, side view, reverse)

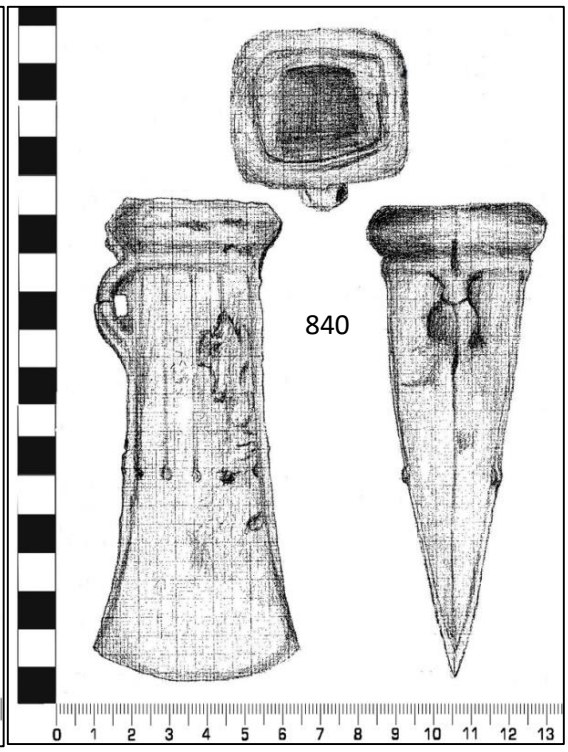
River Thames at Erith (Kent): *Sompting type, Cardiff II variant* (no. 806: obverse)

River Medway at Chatham (Kent): *Transitional type* (no. 807: reverse, view inside socket, side view)



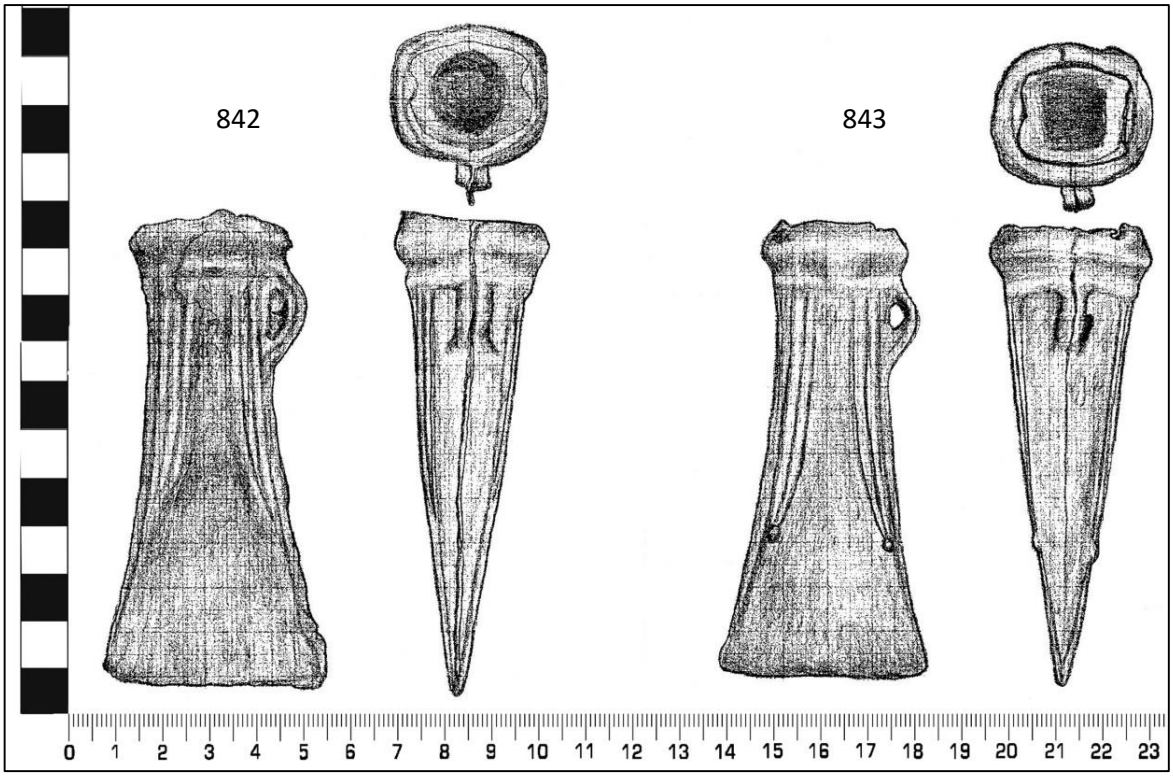


Boston (Lincolnshire): *Sompting type, Cardiff II variant* (no. 838: obverse, view inside socket, side view)



Scunthorpe (Lincolnshire): *Sompting type, Cardiff II variant* (no. 840: obverse, view view inside socket, side view)

Cringleford Hoard (Norfolk): *East Rudham type*
(nos. 842-843: obverse, view inside socket, side view)



Cringleford Hoard (Norfolk): *East Rudham type* (nos. 842-843: obverse, reverse)

East Rudham (Norfolk): *East Rudham type* (nos. 849, 850, 852, 853, 856, 857 and 859), *East Rudham related type* (no. 881): Part of East Rudham Hoard, obverse)

East Rudham (Norfolk): *East Rudham type* (nos. 854, 855+865; fragments not numbered: part of East Rudham Hoard, obverse and fragments)

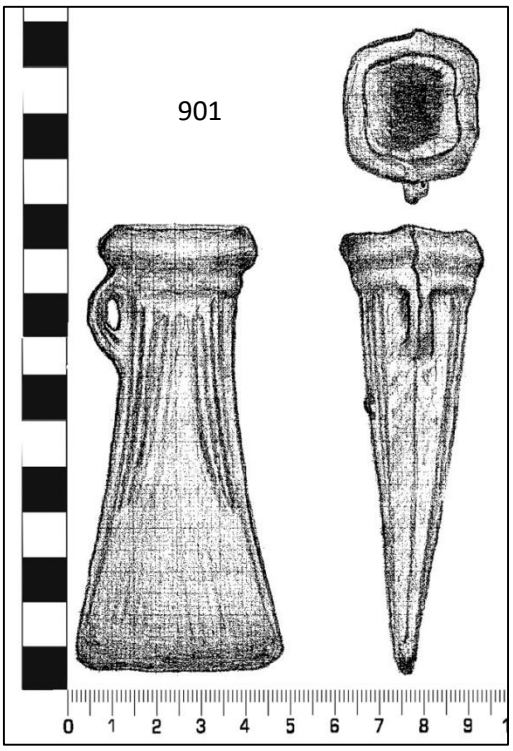
East Rudham (Norfolk): *East Rudham type –plain variant* (no. 881: part of East Rudham Hoard, obverse, reverse)

Watton Hoard (Norfolk): *East Rudham type* (nos. 889-894: obverse)

Watton Hoard (Norfolk): *East Rudham type* (nos. 889-894: reverse)

Watton (Norfolk): *East Rudham type* (no. 895: possibly part of Watton Hoard, obverse, reverse)

Burgh Castle (Norfolk): *Linear-decorated type* (no. 900: obverse, reverse)



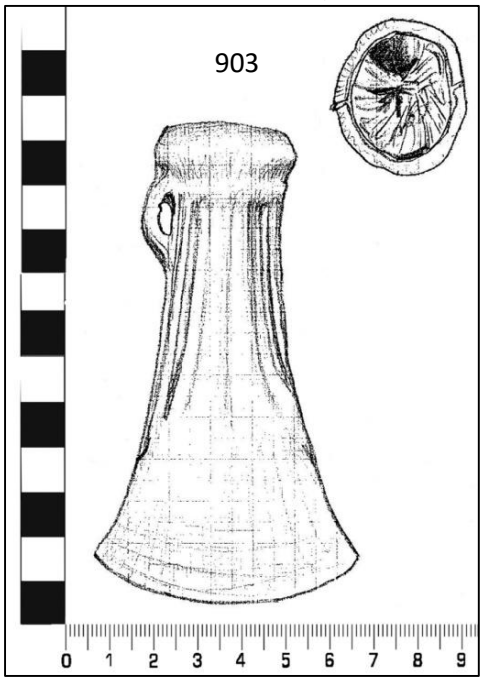
Castle Acre (Norfolk): *East Rudham type* (no. 901: reverse, view inside socket, side view)

Castle Acre (Norfolk): *East Rudham type* (no. 901: obverse, reverse)

Caston (Norfolk): *Sompting type, Tower Hill variant* (no. 902: obverse, side view, reverse)

Hockwold (Norfolk): *Linear-decorated type* (no. 903: obverse, reverse, view inside socket, showing remains of the handle)

Hockwold (Norfolk): *Linear-decorated type* (no. 903: obverse, view inside socket)

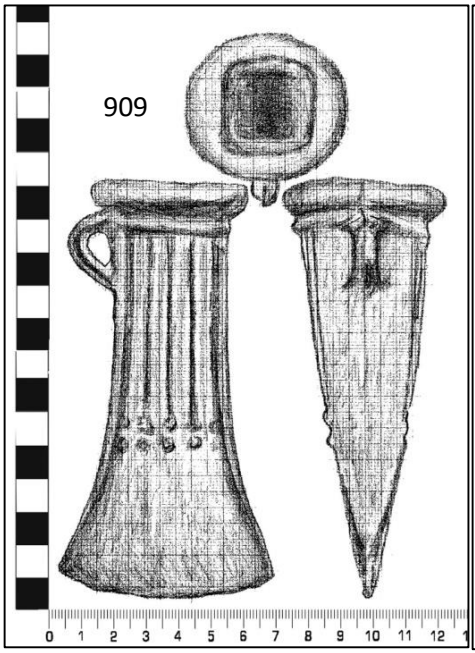


Hockwold (Norfolk): *Armorican type* (no. 905: reverse, side view, obverse)

Little Massingham (Norfolk): *East Rudham type* (no. 907: obverse, reverse)

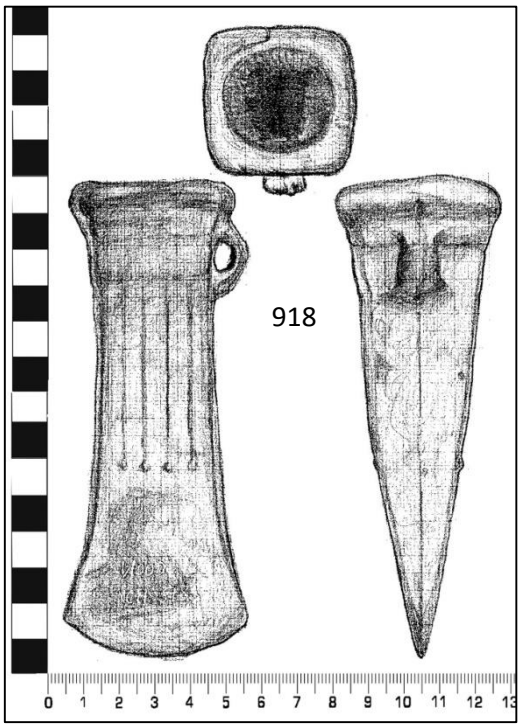
Marsham (Norfolk): *Sompting type, Kingston variant* (no. 908: obverse, reverse)

Methwold (Norfolk): *Sompting type, Cardiff II variant* (no. 909: obverse, view inside socket, side view)



London St, Norwich (Norfolk): *Transitional type* (no. 910: obverse, reverse)

Stalham (Norfolk): *Sompting type, Kingston variant* (no. 914: obverse, reverse)



Wood Norton (Norfolk): *Sompting type, Cardiff II variant* (no. 918: obverse, view inside socket, side view)

Wood Norton (Norfolk): *Sompting type, Cardiff II variant* (no. 918: obverse, reverse)

'Norfolk': *Linear-decorated type* (no. 919: obverse, reverse)

'Norfolk': *Linear-decorated type* (no. 920: obverse, reverse)

Shelford (Nottinghamshire): *Transitional type* (no. 930: obverse, view inside socket, side view)

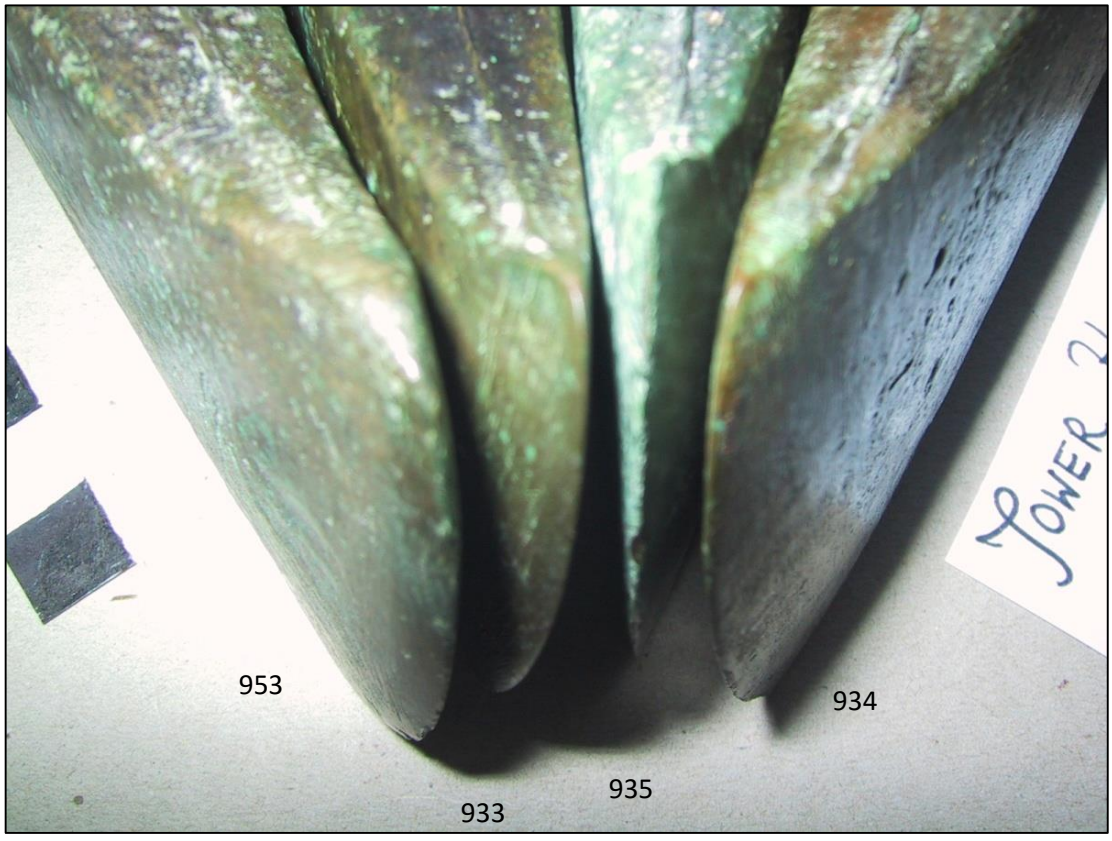
Tower Hill Hoard (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 932-952, reverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 932+939: part of Tower Hill Hoard, obverse, reverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 933+935: part of Tower Hill Hoard, detail of sockets)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 933-935+953: part of Tower Hill Hoard, side view)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 933-935+953: part of Tower Hill Hoard, side view, detail of blades)



Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos.934+935: part of Tower Hill Hoard, loop detail)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 933+953: part of Tower Hill Hoard, reverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 933+953: part of Tower Hill Hoard, obverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 934+935: part of Tower Hill Hoard, reverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 934+935: part of Tower Hill Hoard, obverse)

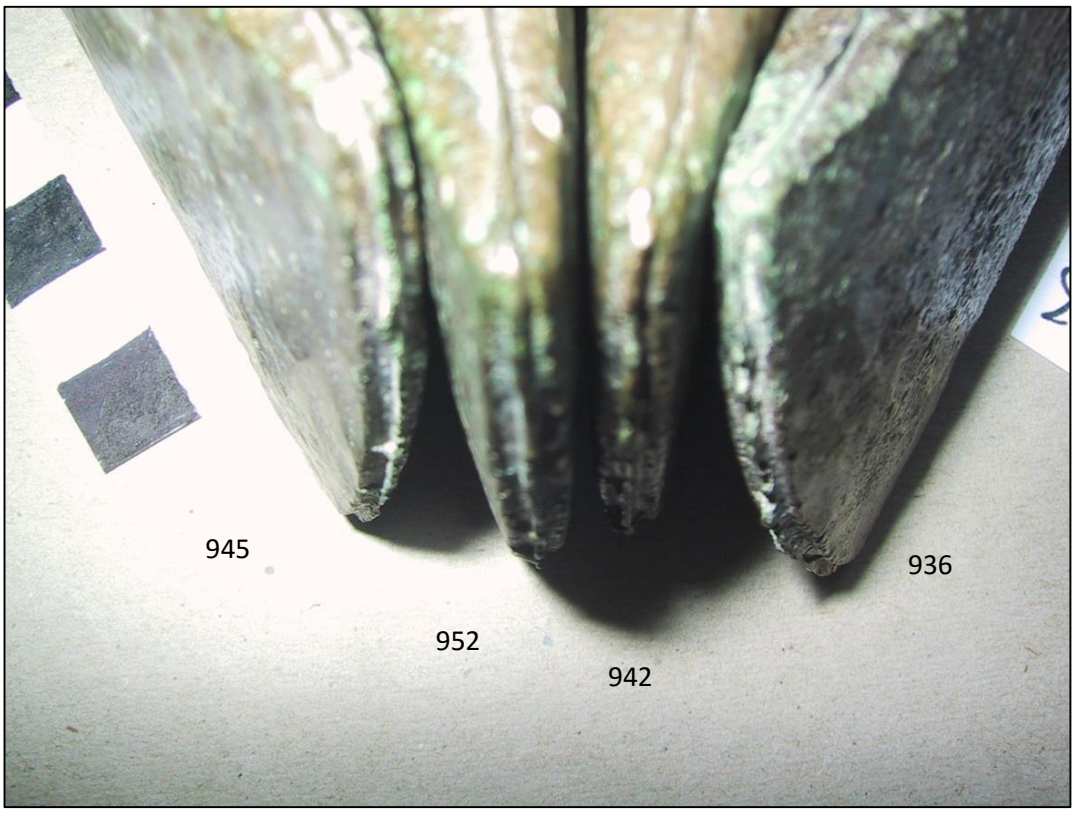
Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 936+942: part of Tower Hill Hoard, reverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 936+942: part of Tower Hill Hoard, obverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 936+942: part of Tower Hill Hoard, side view)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 936, 942, 945+952: part of Tower Hill Hoard, side view)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 936, 942, 945+952: part of Tower Hill Hoard, side view, close-up of loops)



Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 936, 942, 945+952: part of Tower Hill Hoard, side view, detail of blades)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 936+942: part of Tower Hill Hoard, side view, detail of loops)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 937+941: part of Tower Hill Hoard, obverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 937+941: part of Tower Hill Hoard, reverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 938+946: part of Tower Hill Hoard, obverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 938+946: part of Tower Hill Hoard, reverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 940+949: part of Tower Hill Hoard, obverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 940+949: part of Tower Hill Hoard, reverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 943+951: part of Tower Hill Hoard, obverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 943+951: part of Tower Hill Hoard, obverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 944+950: part of Tower Hill Hoard, reverse)

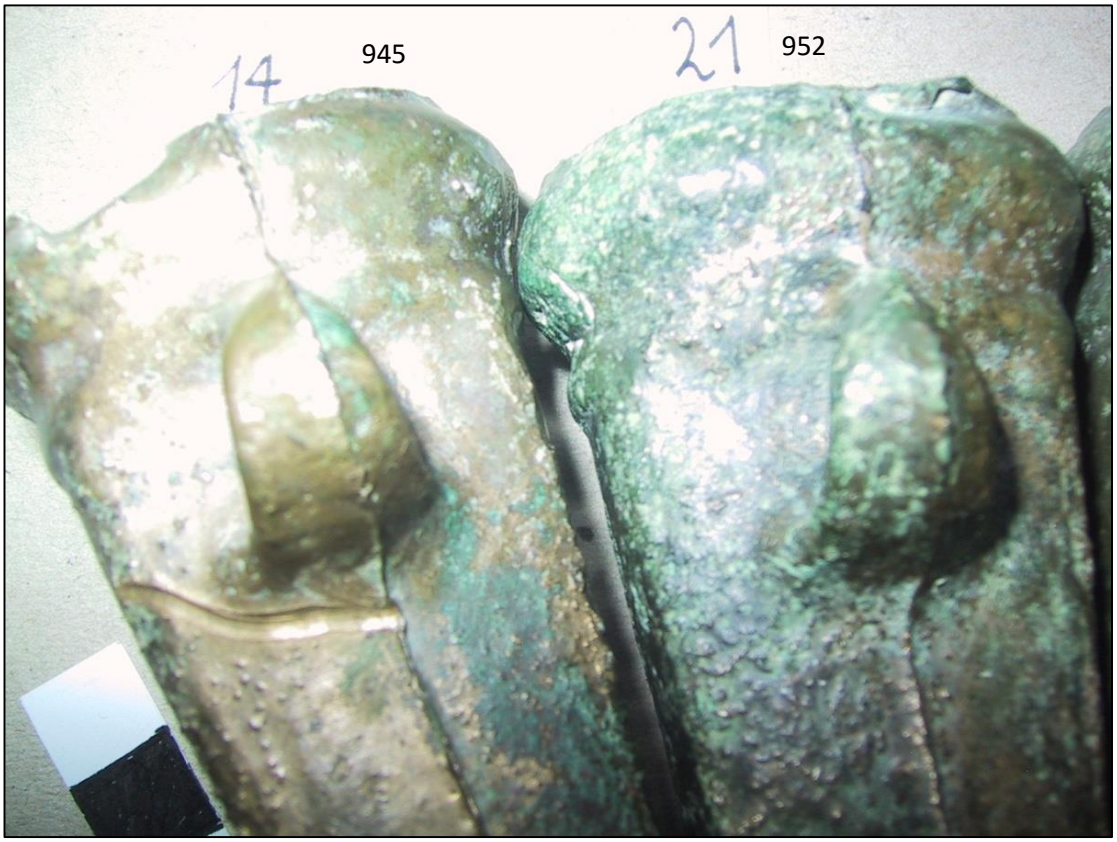
Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 944+950: part of Tower Hill Hoard, obverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 945+952: part of Tower Hill Hoard, reverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 945+952: part of Tower Hill Hoard, obverse)

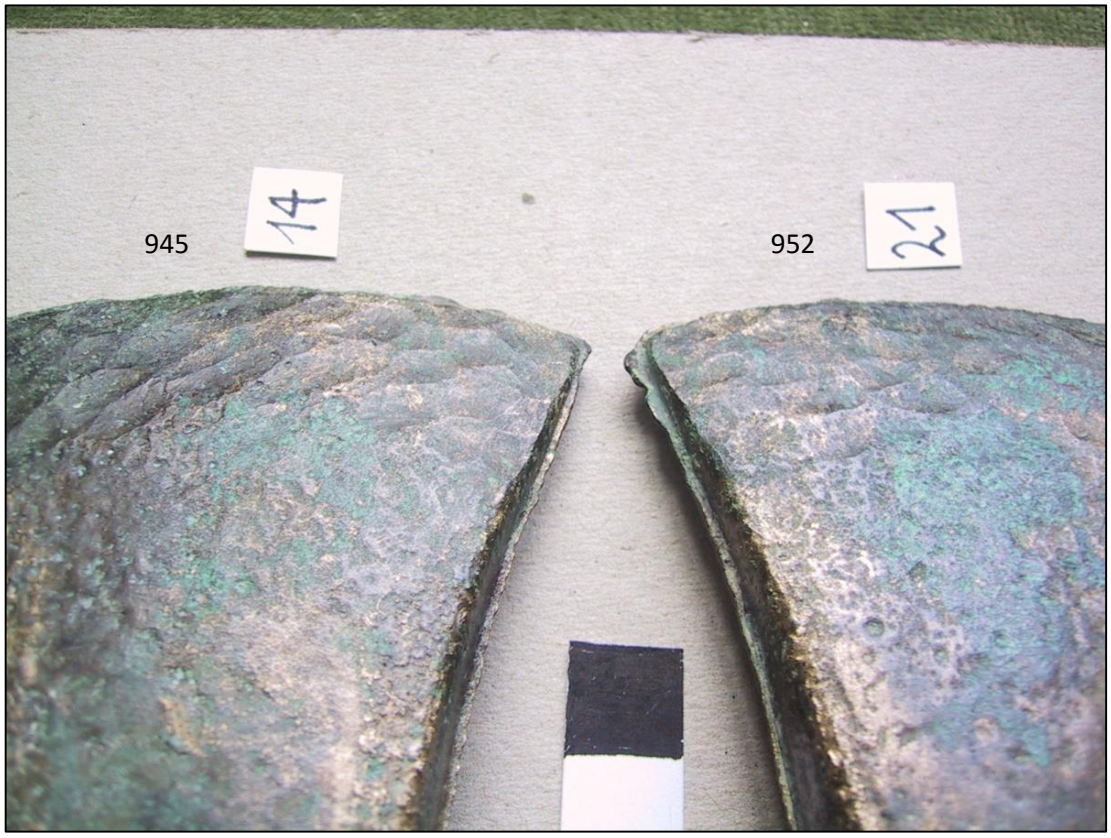
Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 945+952: part of Tower Hill Hoard, detail of sockets)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 945+952: part of Tower Hill Hoard, detail of loops)



Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 945+952: part of Tower Hill Hoard, reverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 945+952: part of Tower Hill Hoard, reverse, detail of casting seams and hammer marks on blades)



Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 947 part of Tower Hill Hoard, obverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 947 part of Tower Hill Hoard, reverse)

Tower Hill (Oxfordshire): *Sompting type, Tower Hill variant* (nos. 948: part of Tower Hill Hoard, obverse)

Tower Hill (Oxfordshire): *Sompting type Tower Hill variant* (nos. 948: part of Tower Hill Hoard, reverse)

Beckley (Oxfordshire): *Sompting type, Tower Hill variant* (no. 955: reverse, obverse)

Middle Hill (Oxfordshire): *Transitional type* (no. 958: obverse, reverse)

Magdalen Bridge, Oxford (Oxfordshire): *Armorican type* (no. 959: obverse, reverse)

Wallingford (Oxfordshire): *Transitional (linear-facetted) type* (no. 961: obverse, reverse)

Wolverley (Shropshire): *Sompting type, Tower Hill variant* (no. 963: obverse, reverse)

Wolverley (Shropshire): *Sompting type, Tower Hill variant* (no. 963: side views)

Ham Hill (Somerset): *Sompting type, Figheldean Down variant* (no. 965: obverse, side view, reverse, side view) ©Laura Burnett (Somerset FLO)

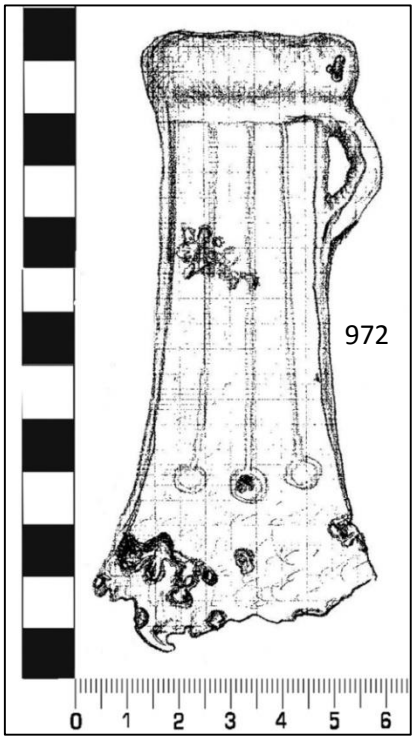
Worle Hall (Somerset): *Sompting type, Kingston variant* (no. 963: obverse, reverse)

Mildenhall Hoard (Suffolk): *Sompting type, Cardiff II variant* (nos. 971+972: reverse)

Mildenhall Hoard (Suffolk): *Sompting type, Cardiff II variant* (nos. 971+972: obverse)

Mildenhall Hoard (Suffolk): *Sompting type, Cardiff II variant* (nos. 971+972: side view)

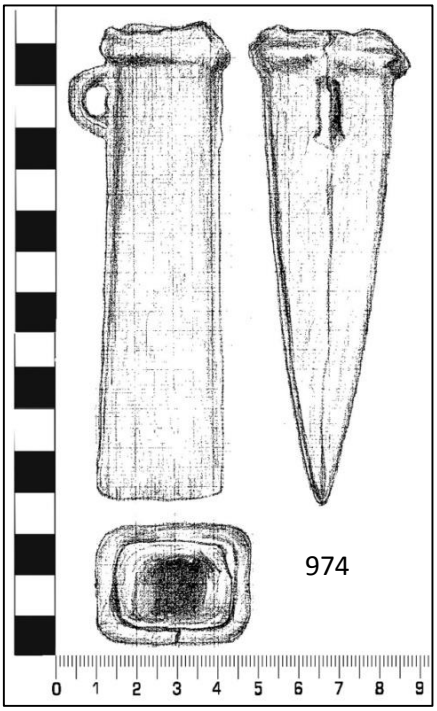
Mildenhall Hoard (Suffolk): *Sompting type, Cardiff II variant* (nos. 972: part of hoard, obverse)



Cavenham (Suffolk): *Transitional type* (no. 973: obverse, reverse)

Clare (Suffolk): *Armorican type* (no. 974: obverse, side view, reverse)

Clare (Suffolk): *Armorican type* (no. 974: reverse, side view, view inside socket)



Eriswell (Suffolk): *Transitional type* (no. 975: obverse, side view, reverse)

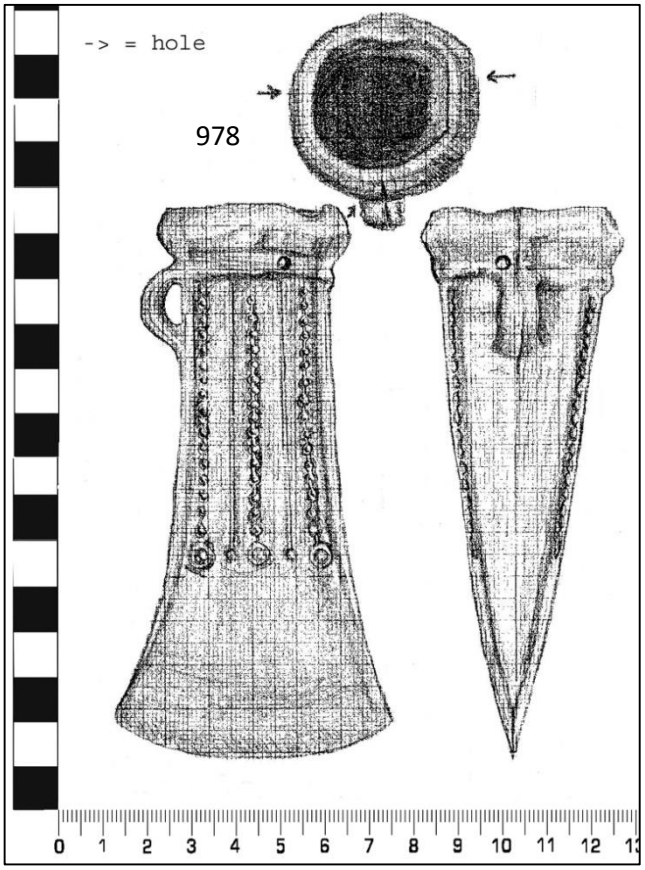
Farnham (Suffolk): *Sompting type, Cardiff II variant* (no. 976: obverse, side view, reverse)

Lackford (Suffolk): *Transitional type* (no. 977: obverse, reverse)

Mildenhall (Suffolk): *Linear-decorated type* (no. 983: obverse, reverse)

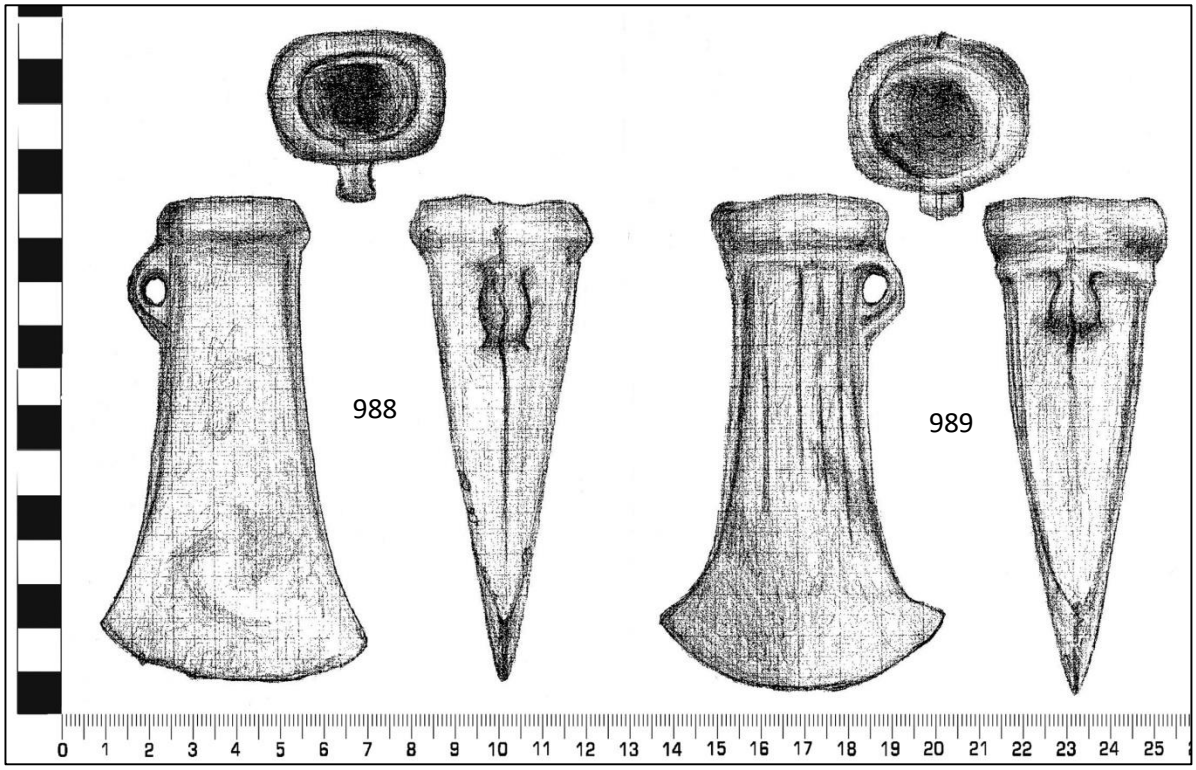
Lackford (Suffolk): *Transitional type* (no. 977: reverse, view inside socket)

Lakenheath (Suffolk): *Sompting type, Kingston variant* (no. 978: reverse, view inside socket, side view)



Kingston Hoard (Surrey): *Sompting type, Kingston variant (nos. 989-991) and Tower Hill variant (no. 988):* obverse

Kingston Hoard (Surrey): *Sompting type, Kingston variant (nos. 989-991) and Tower Hill variant (no. 988):* reverse

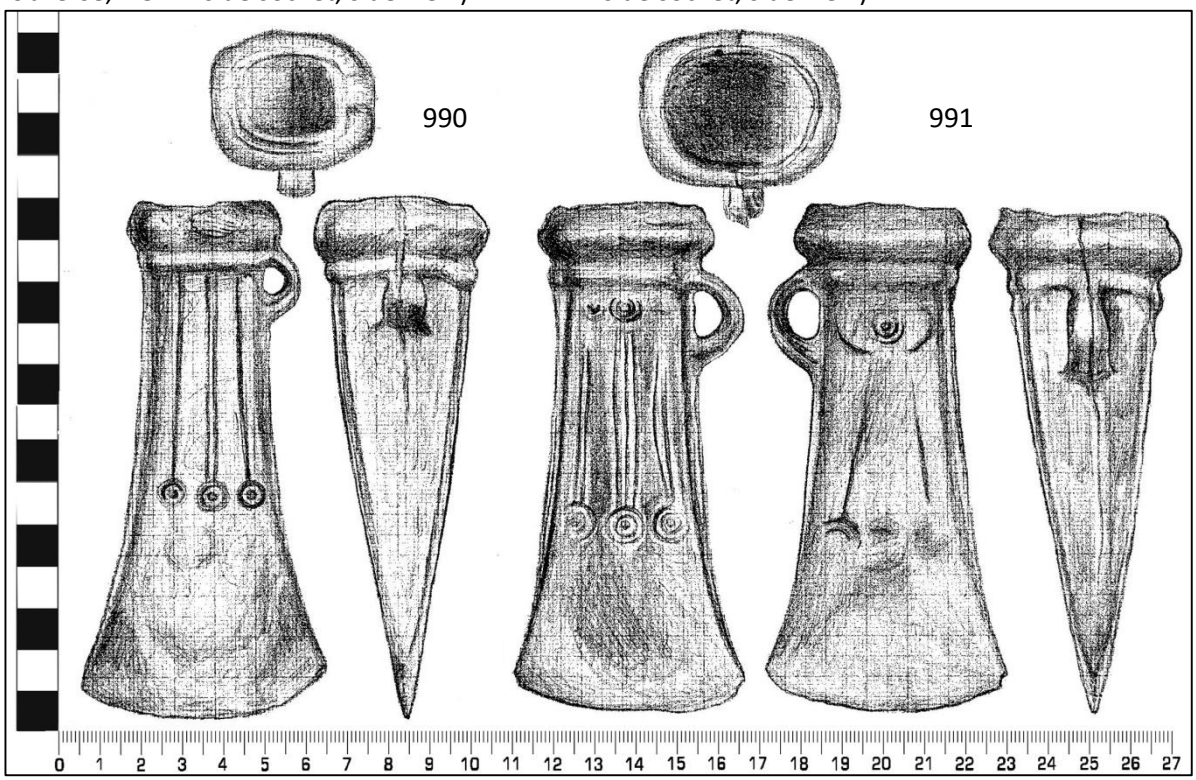


Kingston (Surrey): *Sompting type, Tower Hill variant* (no. 988: part of Kingston Hoard: reverse, view inside socket, side view)

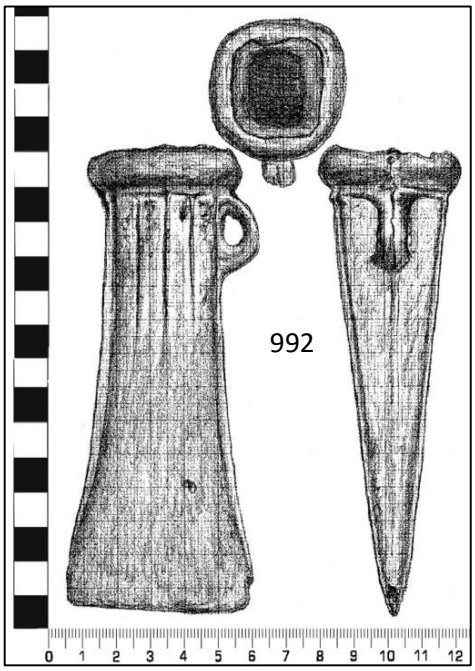
Kingston (Surrey): *Sompting type, Kingston variant* (no. 989: part of Kingston Hoard: obverse, view inside socket, side view)

Kingston (Surrey): *Sompting type, Kingston variant* (no. 990: part of Kingston Hoard: obverse, view inside socket, side view)

Kingston (Surrey): *Sompting type, Kingston variant* (no. 991: part of Kingston Hoard: obverse, view inside socket, side view)

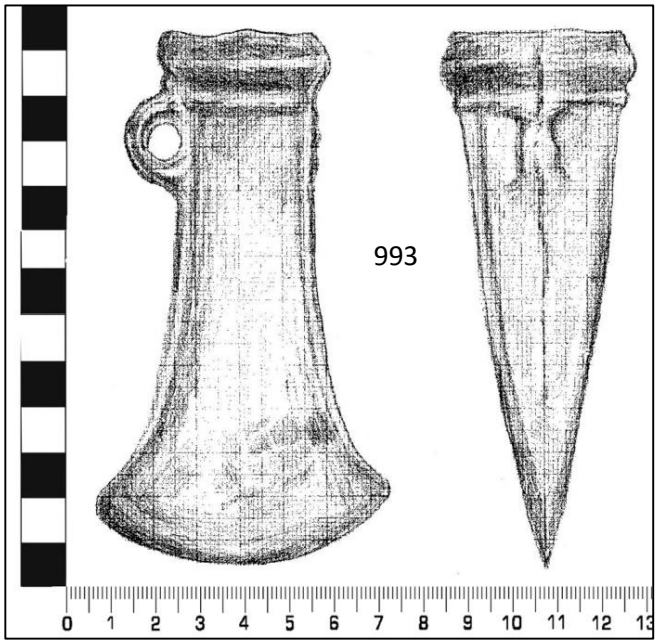


Kingston (Surrey): *Sompting type, Figheldean Down variant* (no. 992: obverse, side view, reverse)



Kingston (Surrey): *Sompting Type, Figheldean Down variant* (no. 992: obverse, view inside socket, side view)

River Thames at Thames Ditton (Surrey): *Sompting type, Tower Hill variant* (no. 993: reverse, side view)



River Thames at Richmond (Surrey): *Transitional type* (no. 995: obverse, side view, reverse)

Ferring Hoard (Sussex): *Axe-dominant* hoard (nos. 999-1008)

Ferring (Sussex): *Sompting type, Cardiff II variant* (nos. 1000-1001)*; Linear-facetted type* (nos. 1003+1004) (obverse, part of Ferring Hoard)

Ferring (Sussex): *Sompting type, Cardiff II variant* (no. 999: part of Ferring Hoard, obverse)

Ferring (Sussex): *unknown types due to position in image* (nos. 1006-1008: part of Ferring Hoard, view inside sockets)

Ferring (Sussex): sword fragment
(part of Ferring Hoard, obverse)

Ferring (Sussex): socketed leather-working knife
(part of Ferring Hoard, obverse)

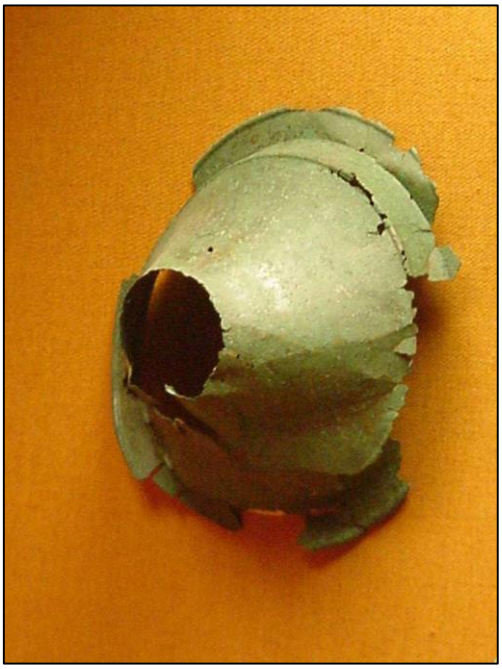
Sompting (Sussex): *East Rudham or linear-decorated type* (nos. 1009-1010); *Sompting type, Figheldean Down variant* (nos. 1011-1014); *Sompting type, Kingston variant* (nos. 1015+1018); *Sompting type, Tower Hill variant* (nos. 1016-1017); *Sompting type, Cardiff II variant* (no. 1019); *Transitional type or Sompting type, Tower Hill variant* (nos. 1020-1021) (nos. 1009-1021: part of Sompting Hoard, on display in Worthing Museum)

Sompting (Sussex): *East Rudham* or *Linear-decorated type* (nos. 1009-1010)*; Sompting type, Tower Hill variant* (nos. 1016-1017), *Sompting type, Cardiff II variant* (no. 1019) (part of Sompting Hoard, on display in Worthing Museum)

Sompting (Sussex): *Sompting type, Figheldean Down variant* (nos. 1013-1014) and *Sompting type, Kingston variant* (no. 1018) (part of Sompting Hoard, on display at Worthing Museum)

Sompting (Sussex): cauldron (part of Sompting Hoard, on display in Worthing Museum)

Sompting (Sussex): phalera (part of Sompting Hoard, on display at Worthing Museum)



Sompting (Sussex): detail of cauldron (part of Sompting Hoard, on display at Worthing Museum)

Alfriston (Sussex): *Armorican type* (no. 1026: obverse, reverse)

Figheldean Down, Wiltshire: razor fragment (part of Figheldean Down Hoard)

Figheldean Down (Wiltshire): *Sompting type, Figheldean Down type* (nos. 1030+1040: part of Figheldean Down Hoard, view inside sockets)

Figheldean Down (Wiltshire): *Sompting type, Figheldean Down variant* (nos. 1030-1032: part of Figheldean Down Hoard, reverse)

Figheldean Down (Wiltshire): Sompting *type, Figheldean Down variant* (nos. 1030-1032: part of Figheldean Down Hoard, side view)

Figheldean Down (Wiltshire): *Sompting type, Figheldean Down variant* (nos. 1030-1032: part of Figheldean Down Hoard, obverse)

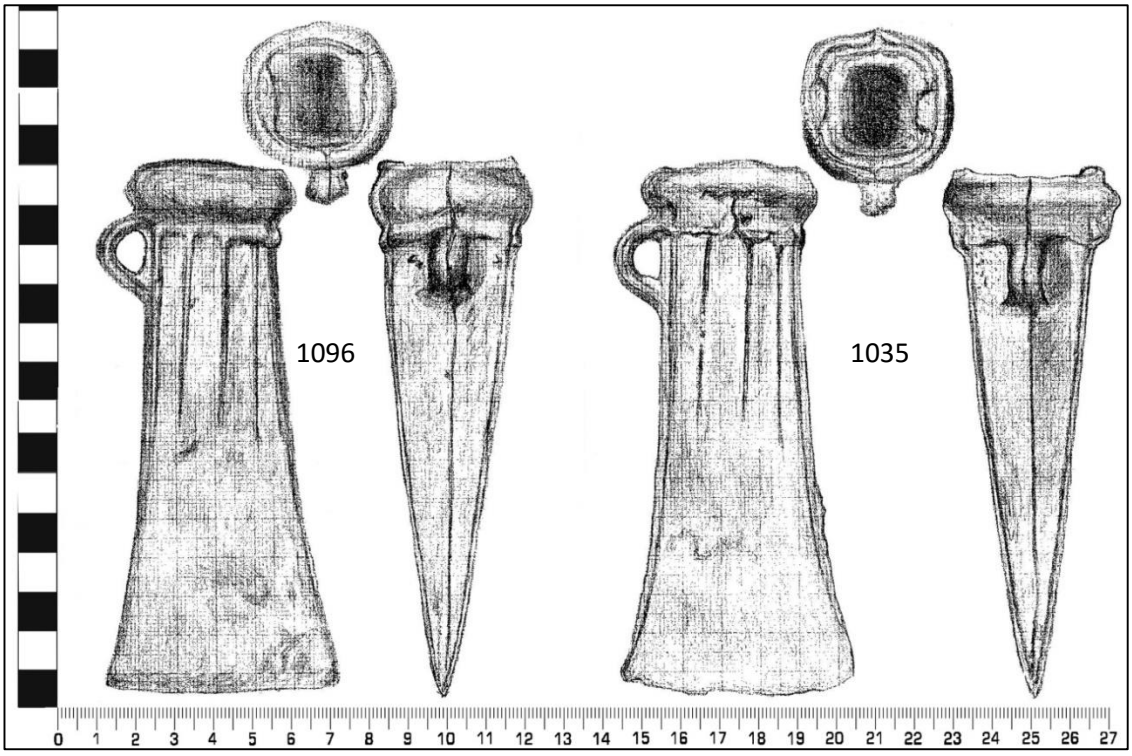
Figheldean Down (Wiltshire, nos. 1033-1036) and Salisbury (no. 1096, Wiltshire: axe in centre, with red string): all *Sompting type, Figheldean Down variant* (part of Figheldean Down Hoard (nos. 1033-1036) and Salisbury Hoard (no. 1096), reverse)

Figheldean Down (Wiltshire): *Sompting type, Figheldean Down variant* (nos. 1033-1036: part of Figheldean Down Hoard, obverse)

Above: 1037; 1038 – Figheldean Down, Wiltshire, *Type Sompting, Variant Figheldean Down* (part of hoard, obverse (left), reverse (right))

Figheldean Down (Wiltshire): *Sompting type, Figheldean Down variant* (nos. 1039-1040: part of Figheldean Down Hoard, obverse)

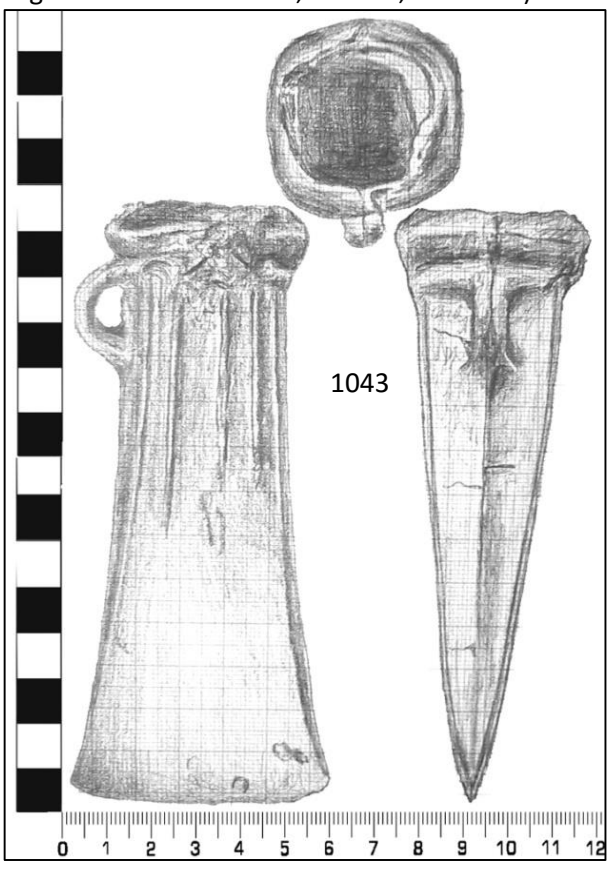
Figheldean Down (Wiltshire): *Sompting type Figheldean Down variant* (nos. 1039-1040: part of Figheldean Down Hoard, reverse)

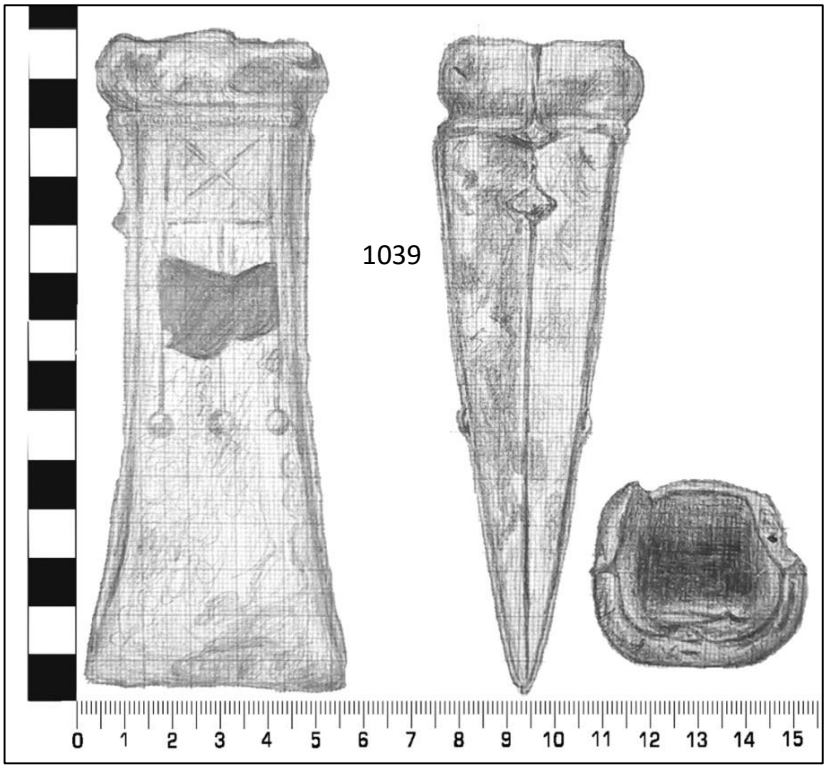


Salisbury (no. 1096, Wiltshire) and Figheldean Down (no. 1035, Wiltshire): *Sompting type, Figheldean Down variant* (part of Salisbury Hoard (no. 1096) and Figheldean Down Hoard (no. 1035): reverse, view inside socket, side view)

Overlay of no. 1034 (Figheldean Down, Wiltshire) and no. 1096 (Salisbury, Wiltshire) to show mould match

Figheldean Down (Wiltshire): *Sompting type, Figheldean Down variant* (no. 1043: part of Figheldean Down Hoard, reverse, side view)





Figheldean Down (Wiltshire): *Sompting type, Figheldean Down variant* (no. 1039: part of Figheldean Down hoard, reverse, view inside socket, side view)

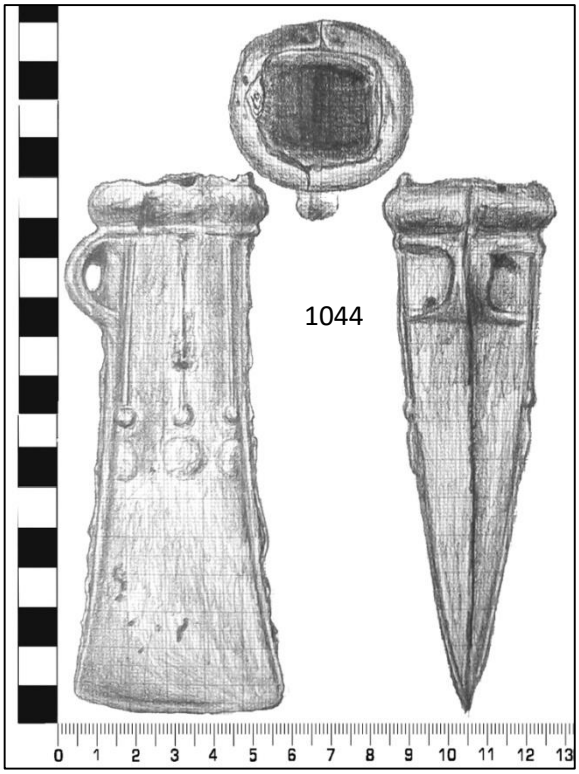
Figheldean Down (Wiltshire): *Sompting type, Figheldean Down variant* (no. 1040: part of Figheldean Down Hoard, reverse, view inside socket, side view)

Figheldean Down (Wiltshire): *Sompting type, Figheldean Down variant* (nos. 1041-1045: part of Figheldean Down Hoard, obverse)

Figheldean Down (Wiltshire): *Sompting type, Figheldean Down variant* (nos. 1041-1045: part of Figheldean Down Hoard, reverse)

Figheldean Down (Wiltshire): *Sompting type, Figheldean Down variant* (nos. 1041-1050: part of Figheldean Down Hoard, group photographed in Salisbury Museum

Figheldean Down (Wiltshire): *Sompting type, Figheldean Down variant* (no. 1044: part of Figheldean Down Hoard, reverse, view inside socket, side view)



Figheldean Down (Wiltshire): *Sompting type, Figheldean Down variant* (nos. 1043, 1045+1048: part of Figheldean Down Hoard, obverse)

Figheldean Down (Wiltshire): *Sompting type, Figheldean Down variant* (nos. 1043, 1045+1048: part of Figheldean Down Hoard, side view)

Figheldean Down (Wiltshire): *Sompting type, Figheldean Down variant* (nos. 1046-1050: part of Figheldean Down Hoard, obverse)

Figheldean Down (Wiltshire): *Sompting type, Figheldean Down variant* (nos. 1046-1050: part of Figheldean Down Hoard, reverse)

Manton Copse Hoard (Preshute, Wiltshire): *Transitional hoard* (nos. 1051-1060

Manton Copse (Wiltshire): *Transitional types* (nos. 1051, 1052+1054: part of Manton Copse Hoard, obverse)

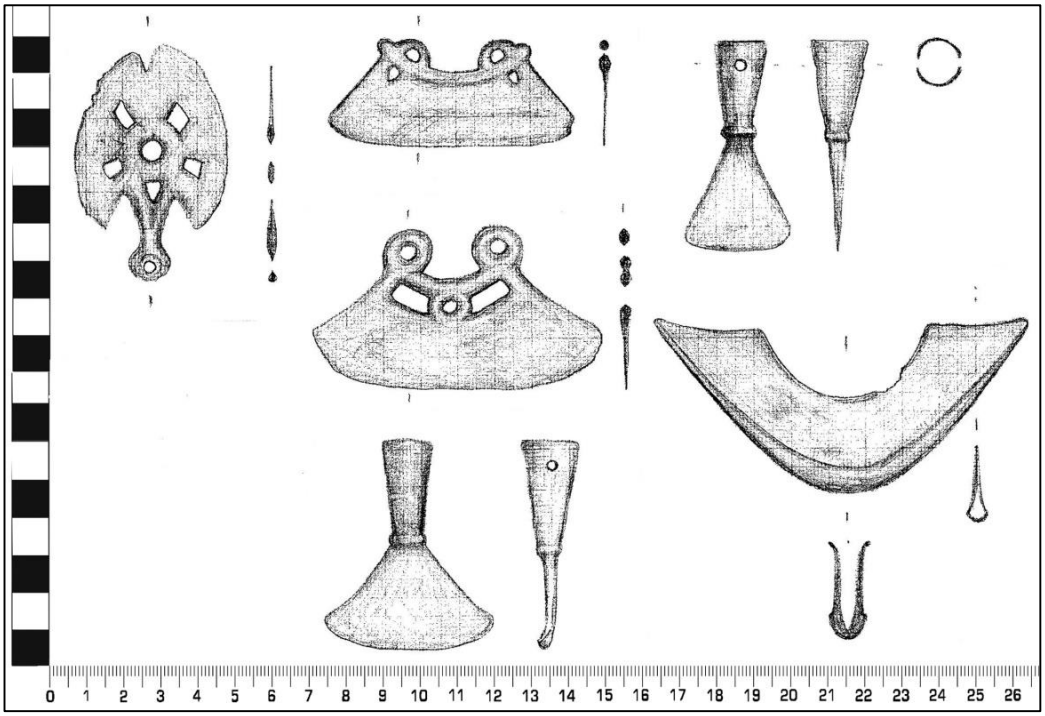
Manton Copse (Wiltshire): *Transitional types* (nos. 1051, 1052+1054: part of Manton Copse Hoard, reverse)

Manton Copse (Wiltshire): *Transitional type* (nos. 1055+1057: part of Manton Copse Hoard, obverse)

Manton Copse (Wiltshire): *Transitional type* (nos. 1055+1057: part of Manton Copse Hoard, reverse)

Manton Copse (Wiltshire): *Transitional type* (nos. 1056+1060: part of Manton Copse Hoard, obverse)

Manton Copse (Wiltshire): *Transitional type* (nos. 1056+1060: part of Manton Copse Hoard, reverse)

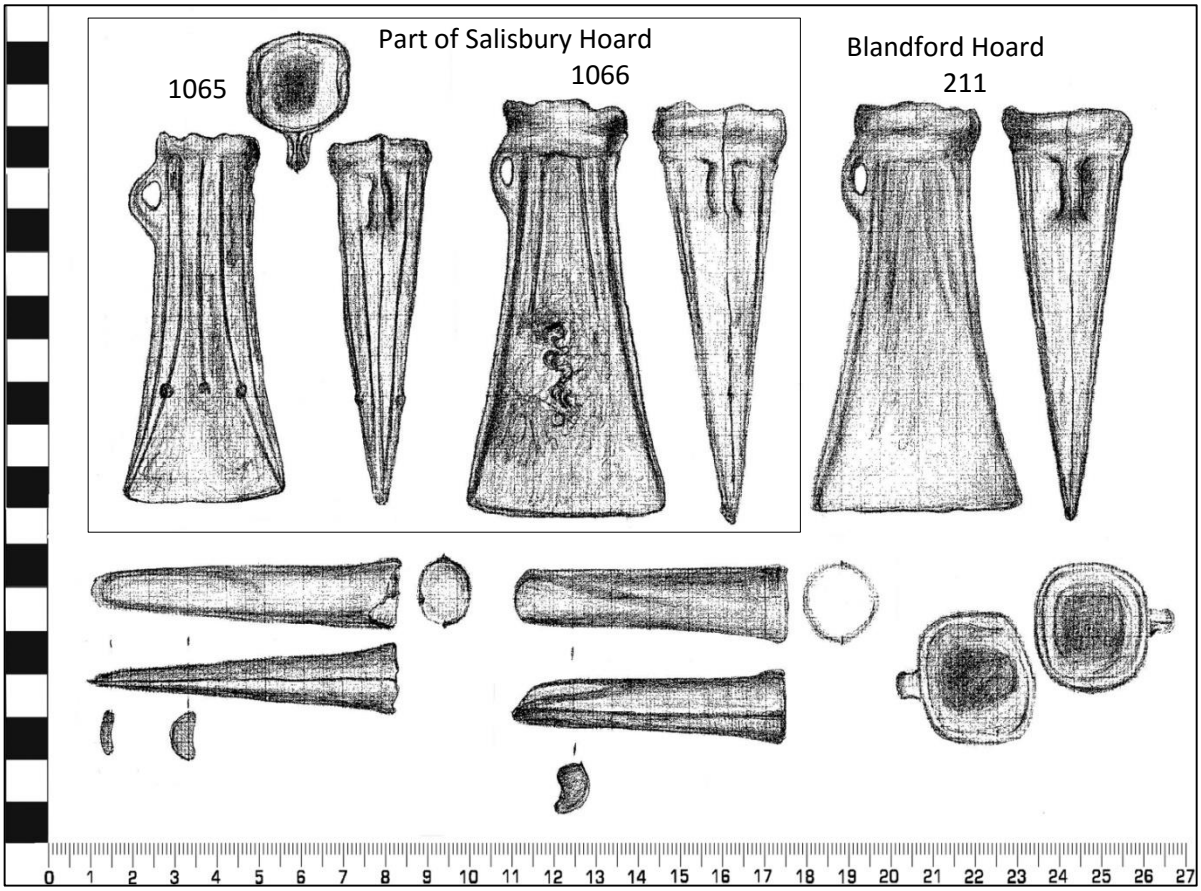


Salisbury (Wiltshire): oval razor, two single-edged razors, two leather-working knives and a boat-shaped chape (clockwise from left, part of Salisbury Hoard)

Salisbury (Wiltshire): *Portland type* (nos. 1063+1082) and (anti-clockwise) four miniature cauldrons, Late Bronze Age socketed axe, spearhead, socketed gouge, two chisels, oval razor, palstave and socketed knife (part of Salisbury Hoard, obverse)

Salisbury (Wiltshire): *Portland type* (nos. 1064, 1065+1072: part of Salisbury Hoard, reverse)

Salisbury (Wiltshire): *Portland type* (nos. 1064, 1065+1072: part of Salisbury Hoard, obverse)



Salisbury (Wiltshire): *Portland type* (no. 1065) and *Blandford type* (no. 1066) (part of Salisbury Hoard, reverse, side view, view into socket) and Blandford Hoard (no. 211, two socketed gouges, Dorset): *Blandford type* (no. 211) (reverse, side view, view into sockets)

Salisbury (Wiltshire): *Portland type* (nos. 1063+1082: part of Salisbury Hoard, obverse)

Salisbury (Wiltshire): *Portland type* (nos. 1065+1082: part of Salisbury Hoard, reverse)

Salisbury (Wiltshire): *Portland type* (nos. 1066-1071: part of Salisbury Hoard, obverse)

Salisbury (Wiltshire): *Portland type* (nos. 1066-1071: part of Salisbury Hoard, reverse)

Salisbury (no. 1066, Wiltshire) and Blandford (no. 211, Dorset): *Blandford type* (part of Salisbury and Blandford hoards, obverse)

Salisbury (no. 1066, Wiltshire) and Blandford (no. 211, Dorset): *Blandford type* (part of Salisbury and Blandford Hoards, reverse)

Salisbury (Wiltshire): *Portland type* (nos. 1073-1076: part of Salisbury Hoard, obverse)

Salisbury (Wiltshire): *Portland type* (nos. 1073-1076: part of Salisbury Hoard, reverse)

Salisbury (Wiltshire): *Portland type* (nos. 1080-1085: part of Salisbury Hoard, obverse)

Salisbury (Wiltshire): *Portland type* (nos. 1080-1085: part of Salisbury Hoard, reverse)

Salisbury (Wiltshire): *Portland type* (nos. 1077-1079: part of Salisbury Hoard, obverse)

Salisbury (Wiltshire): *Portland type* (nos. 1077-1079: part of Salisbury Hoard, reverse)

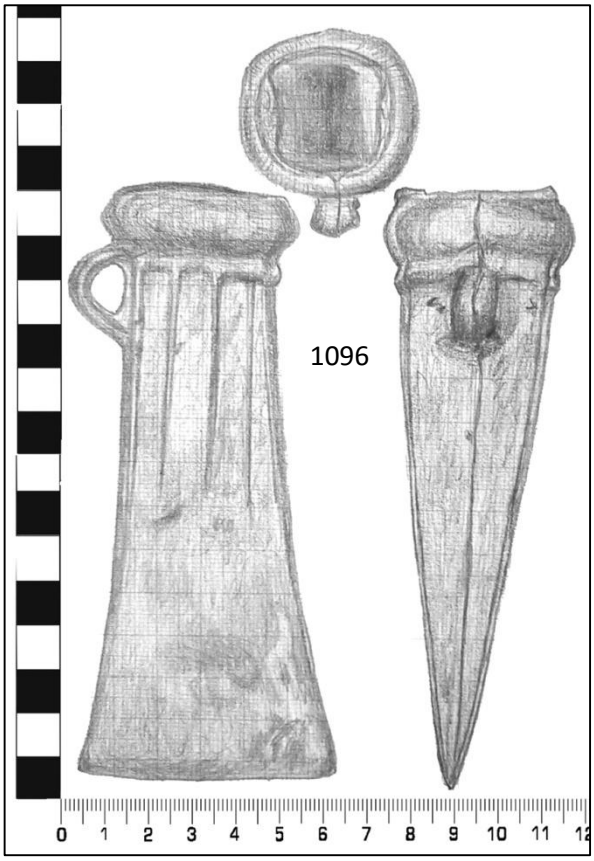
Salisbury (Wiltshire): *Portland type* (nos. 1068+1083: part of Salisbury Hoard, obverse)

Salisbury (Wiltshire): *Portland type* (nos. 1068+1083: part of Salisbury Hoard, reverse)

Salisbury (Wiltshire): *Portland type* (nos. 1077+ 1084: part of Salisbury Hoard, reverse)

Salisbury (Wiltshire): *Portland type* (nos. 1077+ 1084: part of Salisbury Hoard, obverse)

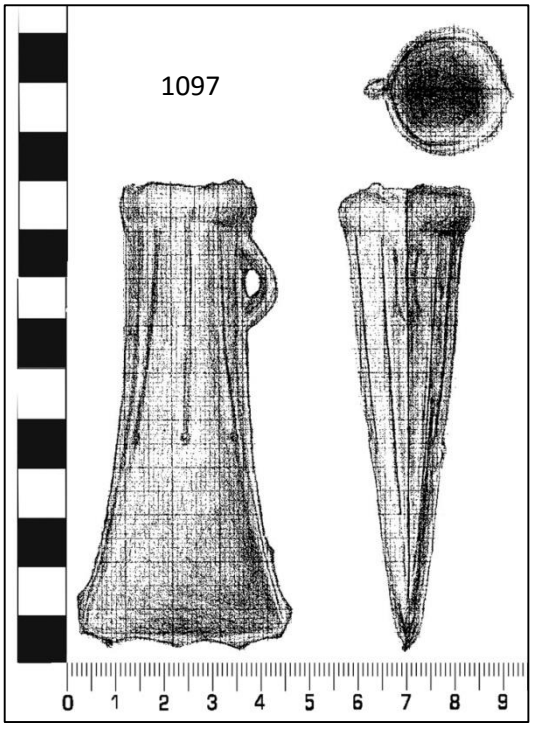
Portland (no. 601, Dorset) and Salisbury (no. 1086, Wiltshire): *Portland type* (part of Portland and Salisbury Hoards, obverse)



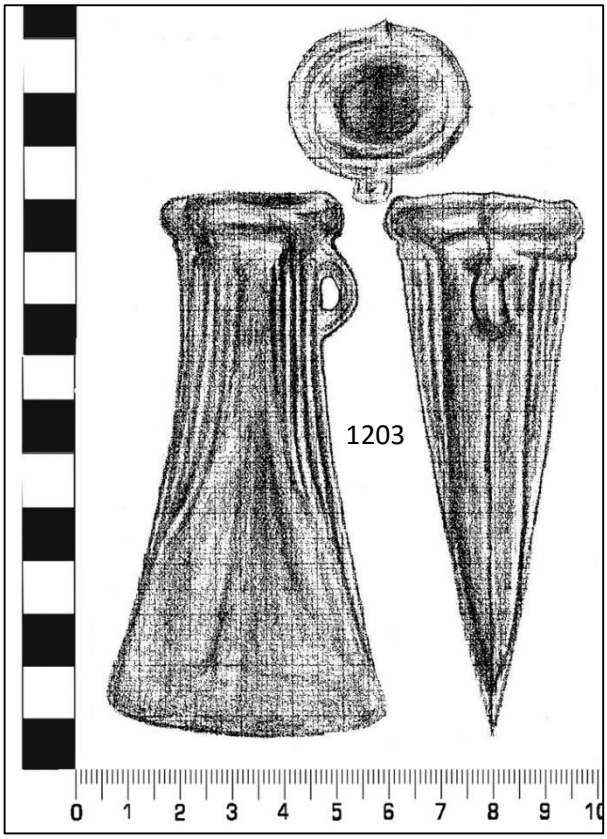
Salisbury (Wiltshire): *Sompting type, Figheldean Down variant* (no. 1096: part of Salisbury Hoard, reverse, view into socket, side view)

Salisbury (Wiltshire): *Sompting type, Figheldean Down variant* (no. 1096: part of Salisbury Hoard, obverse, reverse)

Salisbury (Wiltshire): *Portland type* (no. 1097: part of Salisbury Hoard, obverse, side view, view into socket)



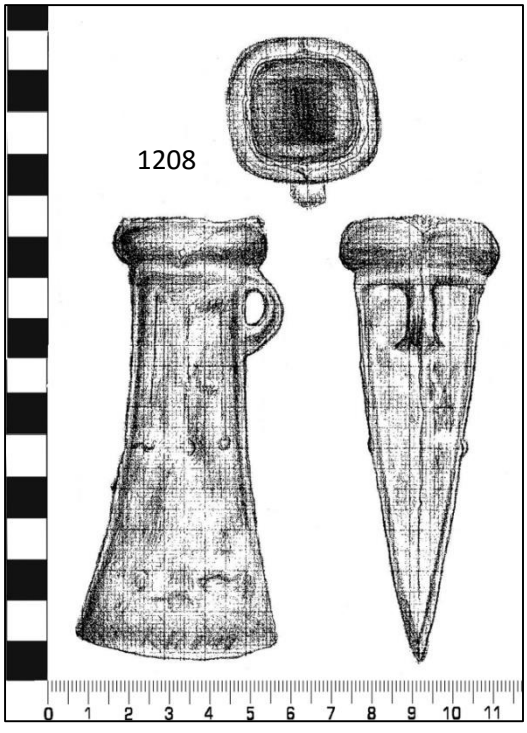
Salisbury (Wiltshire): *Portland type* (no. 1097: part of Salisbury Hoard, obverse, reverse)



Oldbury Hill/Camp (Wiltshire): *Linear-decorated type* (no. 1203: obverse, view inside socket, side view)

Oldbury Hill/Camp (Wiltshire): *Linear-decorated type* (no. 1203: obverse, reverse)

Inglesham (Wiltshire): *Transitional type* (no. 1208: obverse, view inside socket, side view)



Inglesham (Wiltshire): *Transitional type* (no. 1208: obverse, side view, reverse)

Armorican type axes from Wiltshire:
No. 1204 (Chilton Foliat, Wiltshire, obverse)
No. 1207 (East Kennett, Wiltshire, obverse)
No. 1216 (Shalbourne, Wiltshire, obverse)

Armorican type axes from Wiltshire:
No. 1204 (Chilton Foliat, Wiltshire, side view)
No. 1207 (East Kennett, Wiltshire, side view)
No. 1216 (Shalbourne, Wiltshire, side view)

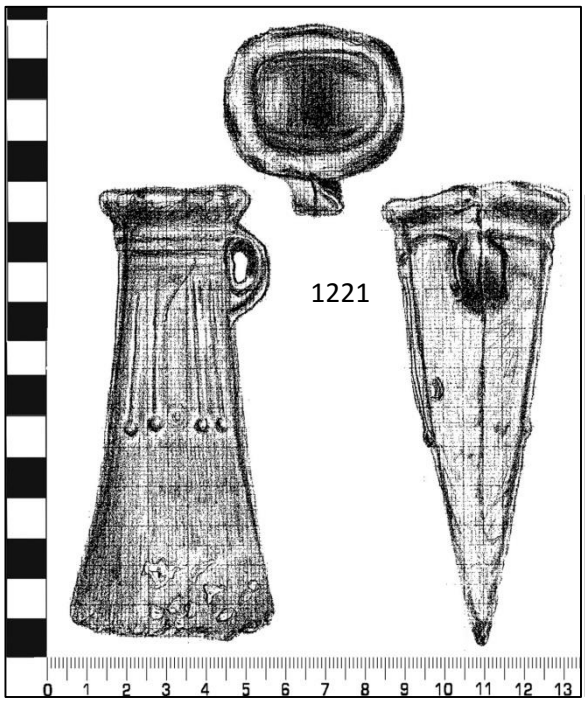
Armorican type axes from Wiltshire:
No. 1204 (Chilton Foliat, Wiltshire, reverse)
No. 1207 (East Kennett, Wiltshire, reverse)
No. 1216 (Shalbourne, Wiltshire, reverse)

Armorican type axes from Wiltshire:
No. 1204 (Chilton Foliat, Wiltshire)
No. 1207 (East Kennett, Wiltshire, intact clay core)
No. 1216 (Shalbourne, Wiltshire)

Ludgershall (Wiltshire): *Sompting type, Kingston variant* (no. 1209: obverse, side view, reverse)

near Salisbury (Wiltshire): *Sompting type, Cardiff II variant* (no. 1215: obverse, side view, reverse)

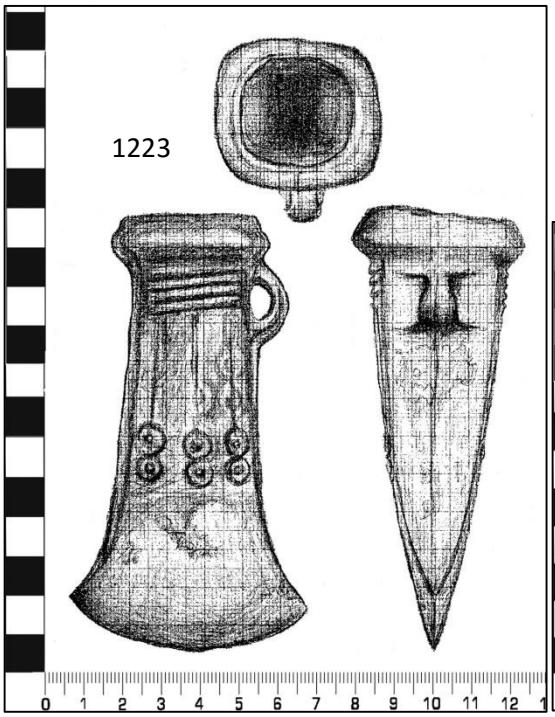
Gas Works (Worcestershire): *Transitional type* (no. 1220: obverse, reverse)



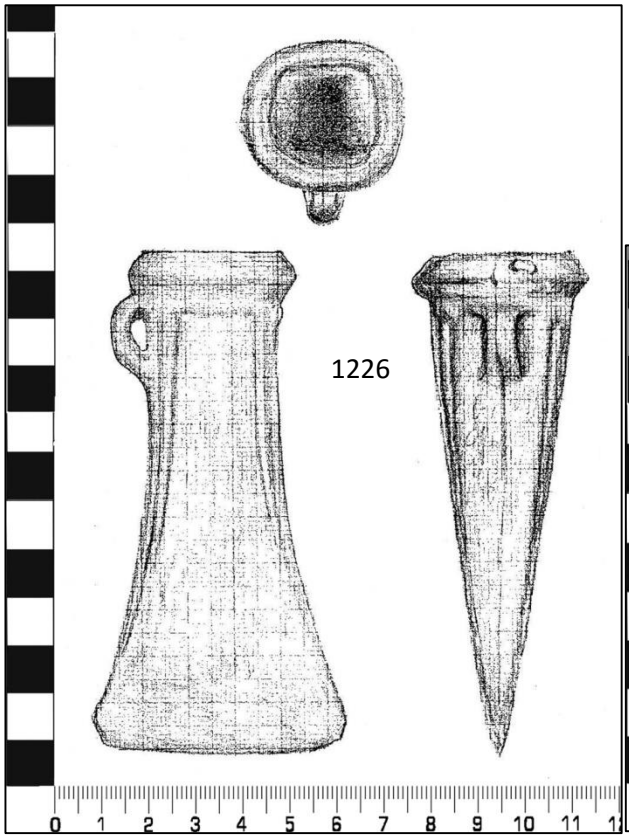
Broughton (Yorkshire): *Sompting type, Kingston variant* (no. 1221: obverse, view inside socket, side view)

Broughton (Yorkshire): *Sompting type, Kingston variant* (no. 1221: obverse, side view, reverse)

Cayton Carr (Yorkshire): *Sompting type, Kingston variant* (no. 1223: obverse, side view, view into socket)



Cayton Carr (Yorkshire): *Sompting type, Kingston variant* (no. 1223: obverse, side view, reverse)

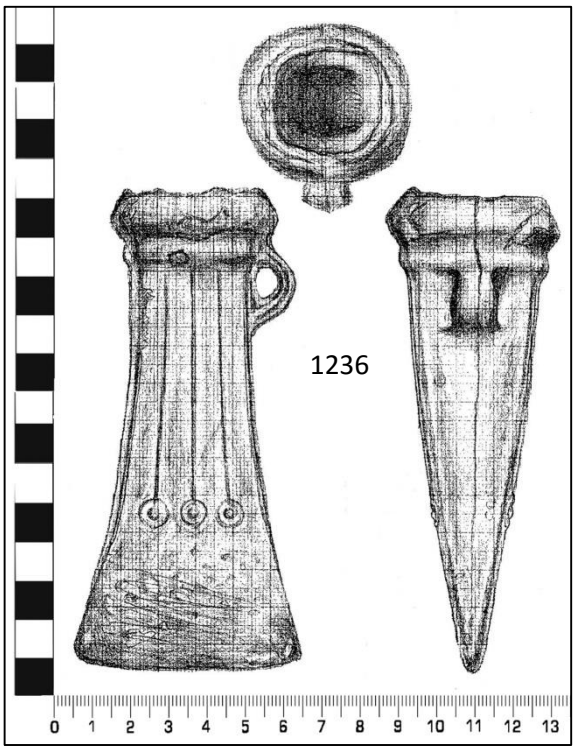


Gembling (Yorkshire): *Transitional type* (no. 1226: obverse, view inside socket, side view)

Gembling (Yorkshire): *Transitional type* (no. 1226: obverse, reverse)

Givendale (Yorkshire): *Sompting type, probably Tower Hill variant* (no. 1232: obverse, view inside socket, side view)

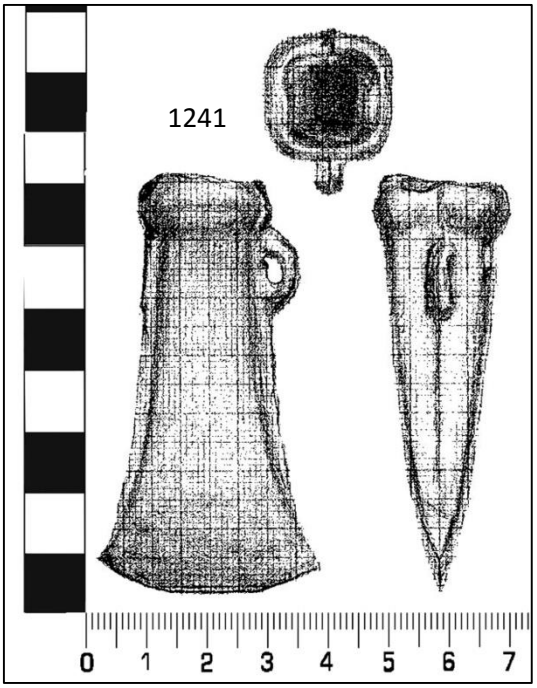
Givendale (Yorkshire): *Sompting type, probably Tower Hill variant* (no. 1232: obverse, reverse)



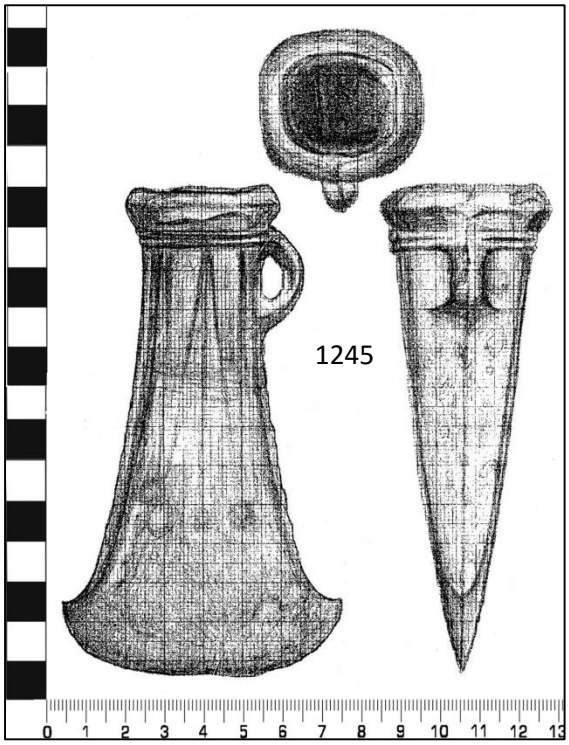
Seamer Carr (Yorkshire): *Sompting type, Kingston variant* (no. 1236: obverse, view into socket, side view)

Seamer Carr (Yorkshire): *Sompting type, Kingston variant* (no. 1236: obverse, side view, reverse)

Topcliffe (Yorkshire): *possibly Armorican type* (no. 1241: obverse, view inside socket, side view)



Topcliffe (Yorkshire): *possibly Armorican type* (no. 1241: obverse, side view, reverse)



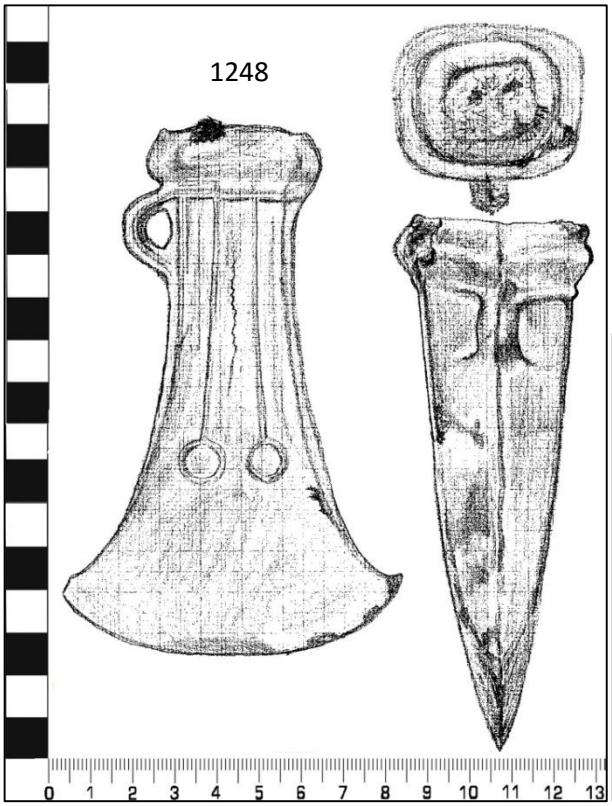
Craichie (Angus): *Sompting type, Kingston variant* (no. 1245: obverse, view inside socket, side view

Ulverston (Cumbria): *Sompting type, Kingston variant* (no. 1396: part of Ulverston Hoard, obverse side view, reverse)

Craichie (Angus): *Sompting type, Kingston variant*
(no. 1245: obverse, side view, reverse)

Arachaid (Argyll): *Transitional type* (no. 1246: obverse, reverse)

Lochgair (Argyll): *Sompting type, Tower Hill variant* (no. 1248: reverse, view into socket, side view)



Lochgair (Argyll): *Sompting type, Tower Hill variant* (no. 1248: obverse, reverse)

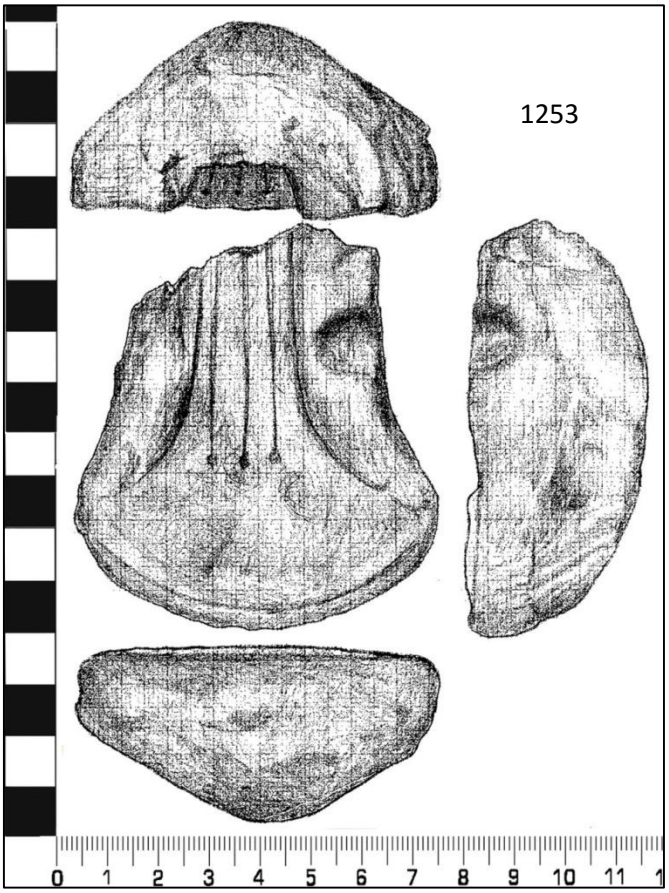
Ardrossan (Ayrshire): *Steatite mould* (no. 1251: obverse, reverse)

Corsbie Tower (Berwickshire): *Sompting type, Kingston variant* (no. 1252: obverse, reverse)

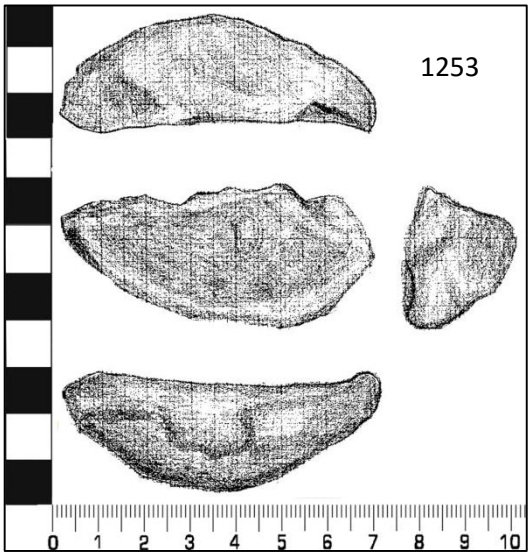
Corsbie Tower (Berwickshire): *Sompting type, Kingston variant* (no. 1252: reverse, view into socket, side view)

Little Dunagoil (Bute): *Ceramic mould* (no. 1253: two fragments: obverse)

Little Dunagoil (Bute): *Ceramic mould* (no. 1253: larger of two fragments: obverse, top, side and bottom)

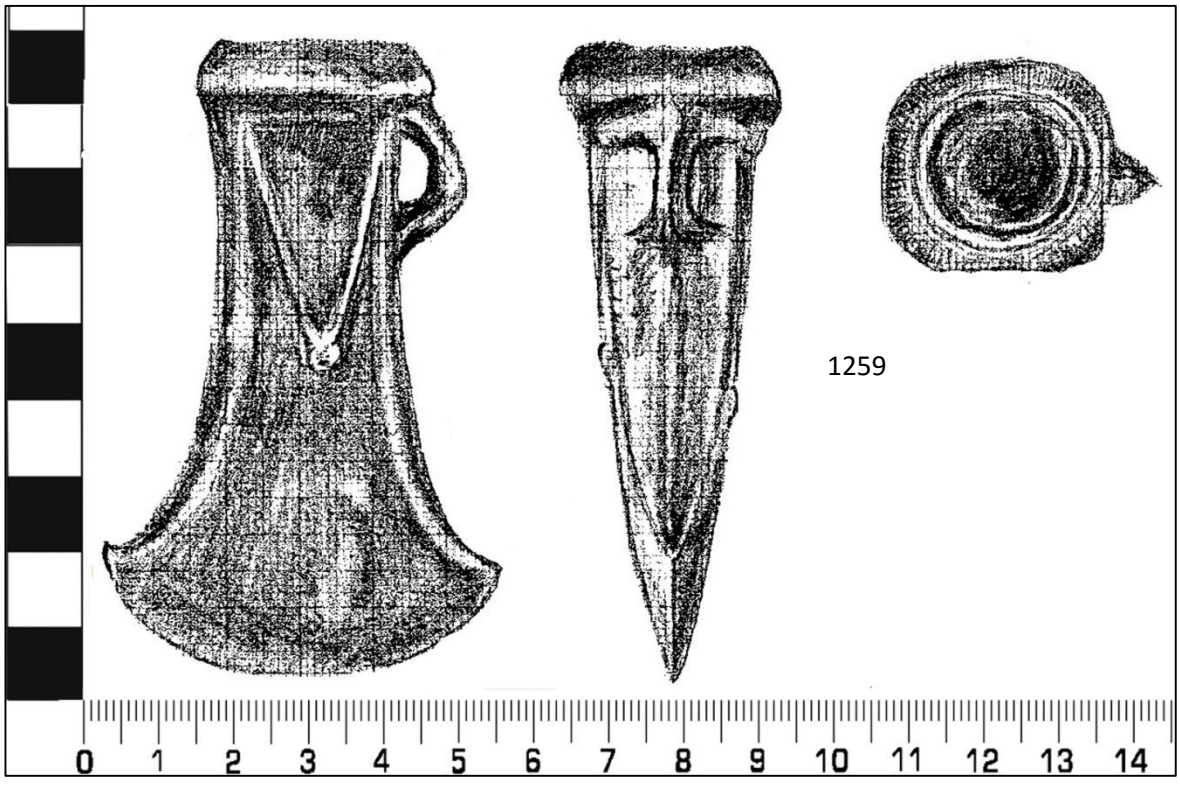


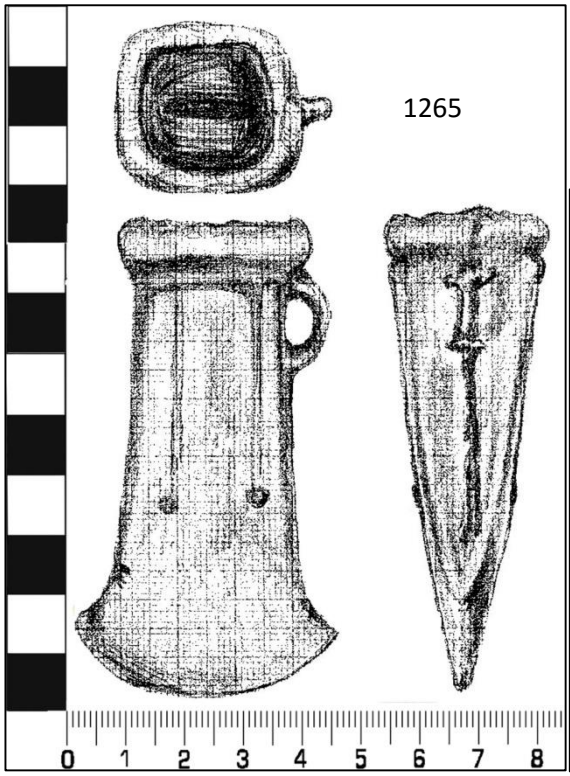
Little Dunagoil (Bute): *Ceramic mould* (no. 1253: smaller of two fragments: obverse, top, side and bottom)



Coulter (Lanarkshire): *Sompting type, Kingston variant* (no. 1259: obverse, reverse)

Coulter (Lanarkshire): *Sompting type, Kingston variant* (no. 1259: obverse, side view, view into socket)





Falcon Ave (Edinburgh): *Transitional type* (no. 1265: view inside socket, obverse, side view)

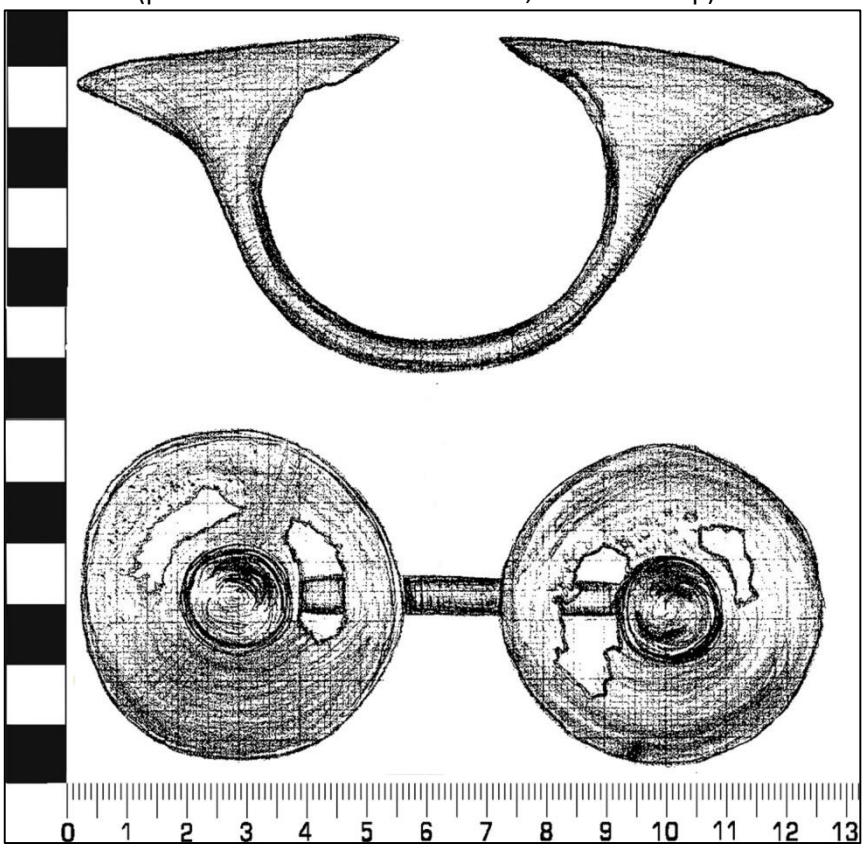
Falcon Ave (Edinburgh): *Transitional type* (no. 1265: obverse, reverse)

Culbin Sands (Morayshire): *iron socketed axe* (no. 1267: obverse, reverse)

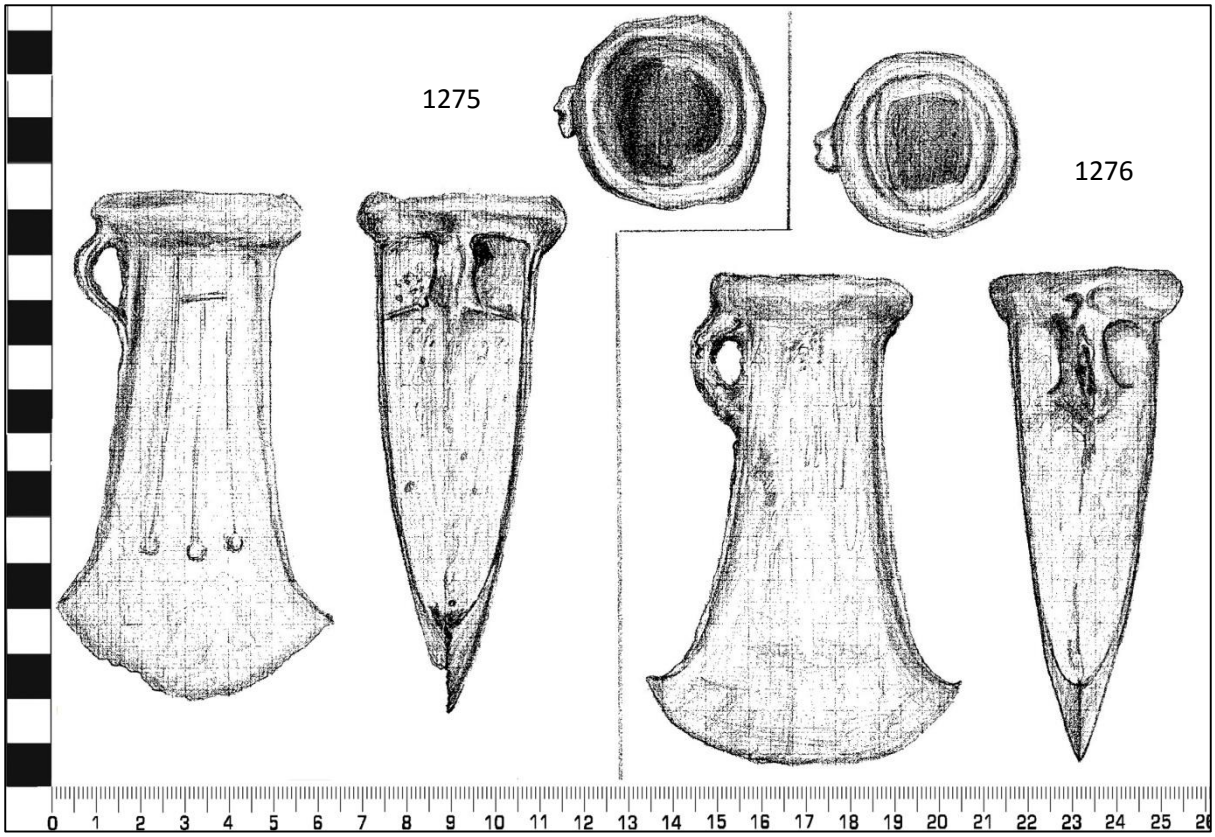
Cronan (Perthshire): *Sompting type, Tower Hill variant* (no. 1271: obverse, view inside socket, side view)

Cronan (Perthshire): *Sompting type, Tower Hill variant* (no. 1271: obverse, reverse)

Poolewe (Ross and Cromarty): penannular ornament with trumpet terminals (part of Poolewe Hoard: obverse, view from top)



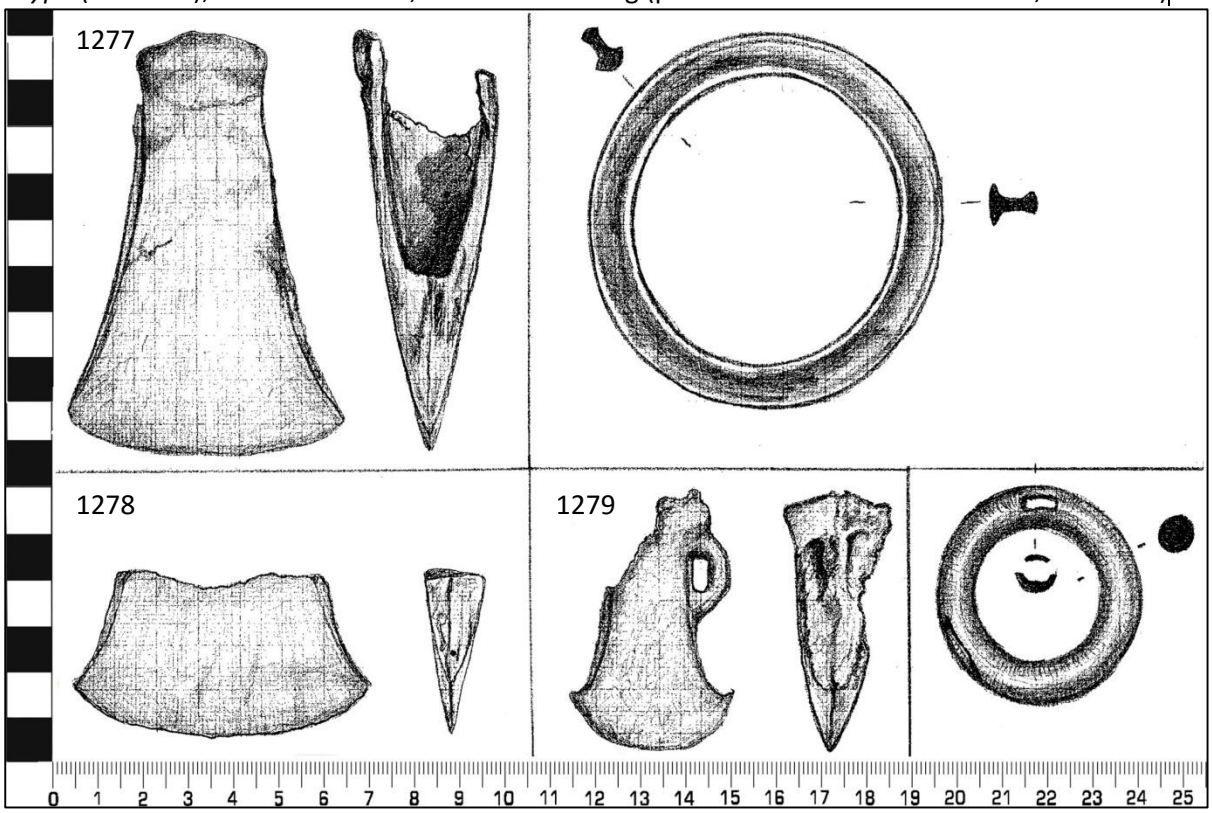
Poolewe Hoard (Ross and Cromarty): ornament with cup-shaped terminals; small ring; large cauldron handle; wood from inside one of the axes' sockets; five socketed axes: *Sompting type, Kingston variant* (no. 1275); *Sompting type, Tower Hill variant* (nos. 1276, 1277 and, possibly, blade fragment no. 1278); *Transitional type* (no. 1280)



Poolewe (Ross and Cromarty): *Sompting type, Kingston variant* (no. 1275: part of Poolewe Hoard, reverse, side view, view inside socket)

Poolewe (Ross and Cromarty): *Sompting type, Tower Hill variant* (no. 1276: part of Poolewe Hoard, reverse, side view, view inside socket)

Poolewe (Ross and Cromarty): *Sompting type, Tower Hill variant* (nos. 1277+1278); *transitional type* (no. 1279); cauldron handle; small harness ring (part of Poolewe Hoard: obverse, side view)

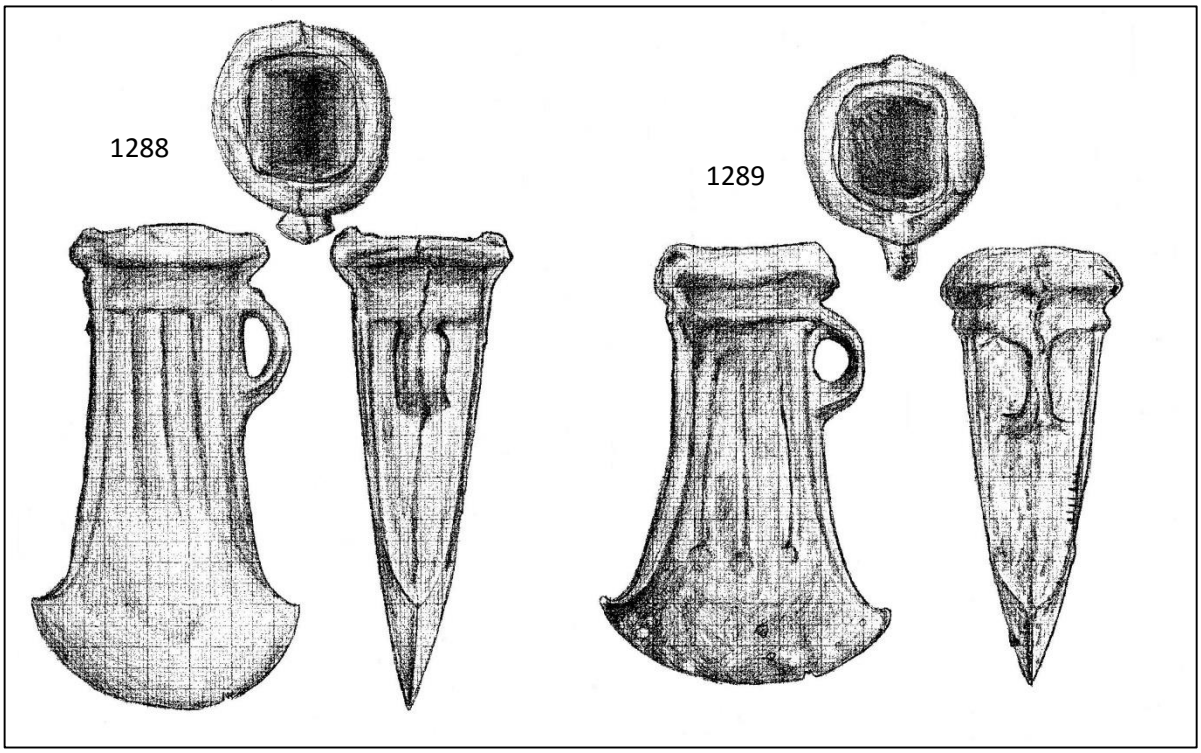


Rosskeen (Ross and Cromarty): *steatite mould* (no. 1280: obverse)

Rosskeen (Ross and Cromarty): *steatite mould* (no. 1280: reverse)

Llanberis (Caernarvonshire): *Sompting type, Tower Hill variant* (no. 1287: obverse, side view, reverse)

Plas-yn-Cefn Hoard (Denbighshire): *Axe hoard, transitional type* (nos. 1288+1289: obverse, view into socket, side view)



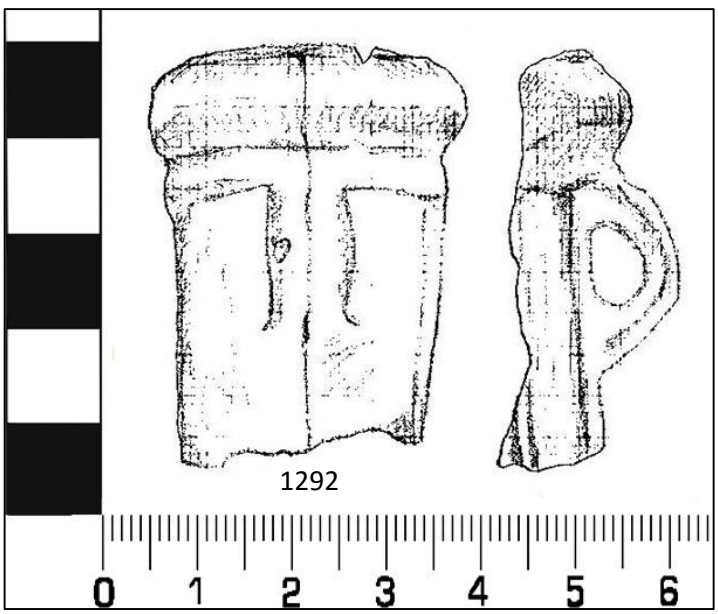
Plas-yn-Cefn (Denbighshire): *Axe hoard, transitional type* (nos. 1288+1289: obverse)

Plas-yn-Cefn (Denbighshire): *Axe hoard, transitional type* (nos. 1288+1289: side view)

Plas-yn-Cefn (Denbighshire): *Axe hoard, transitional type* (nos. 1288+1289: reverse)

Llanbedr Dryffyn, Clwyd (Denbighshire): *Sompting type, Tower Hill variant* (no. 1290: obverse, side view, reverse, side view, view inside socket)

Cardiff II Hoard (Glamorgan): one complete socketed axe and one socketed axe fragment: *Sompting type, Cardiff II variant* (nos. 1292+1293); two razors, four leather-working knives; one complete sickle, one sickle blade, one pole cap.



Cardiff II (Glamorgan): *Sompting type, Cardiff II variant* (no. 1292: part of Cardiff II Hoard, obverse, side view, reverse)

Cardiff II (Glamorgan): *Sompting type, Cardiff II variant* (no. 1292: part of Cardiff II Hoard, obverse, side view, reverse)

Cardiff II (Glamorgan): *Sompting type, Cardiff II variant* (no. 1293: part of Cardiff II Hoard, obverse, side view, reverse)

Cardiff II (Glamorgan): socketed leather-working knives (part of Cardiff II Hoard, obverse)

Cardiff II (Glamorgan): pole cap (part of Cardiff II Hoard, side view)

Cardiff II (Glamorgan): annular and triangular razor (part of Cardiff II Hoard, obverse)

Cardiff II (Glamorgan): socketed sickle and blade fragment of a socketed sickle (part of Cardiff II Hoard, obverse)

Llyn Fawr (Glamorgan): *Sompting type, Cardiff II variant* (nos. 1294+1298); *Transitional type* (1295-1297+1299) and a socketed chisel (far right, not numbered) (part of Llyn Fawr Hoard)

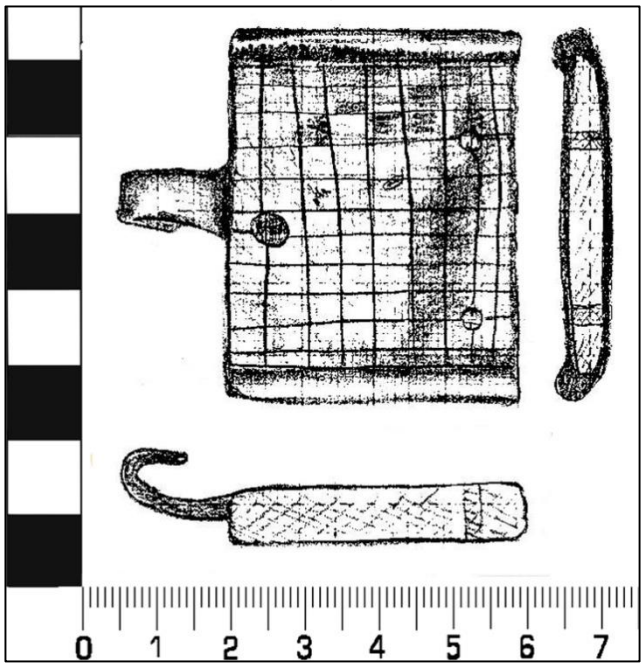
Llyn Fawr (Glamorgan): *Sompting type, Cardiff II variant* (no. 1294: part of Llyn Fawr Hoard, obverse, reverse

Llyn Fawr (Glamorgan): *Transitional type* (nos. 1295, 1296+1299: part of Llyn Fawr Hoard, top row: obverse; bottom row: reverse)

Llyn Fawr (Glamorgan): *Transitional type* (no. 1297: part of Llyn Fawr Hoard, obverse, reverse)

Llyn Fawr (Glamorgan): *Sompting type, Cardiff II variant* (no. 1298: part of Llyn Fawr Hoard, obverse, reverse)

Llyn Fawr (Glamorgan): belt hook (part of Llyn Fawr Hoard, obverse, side views)

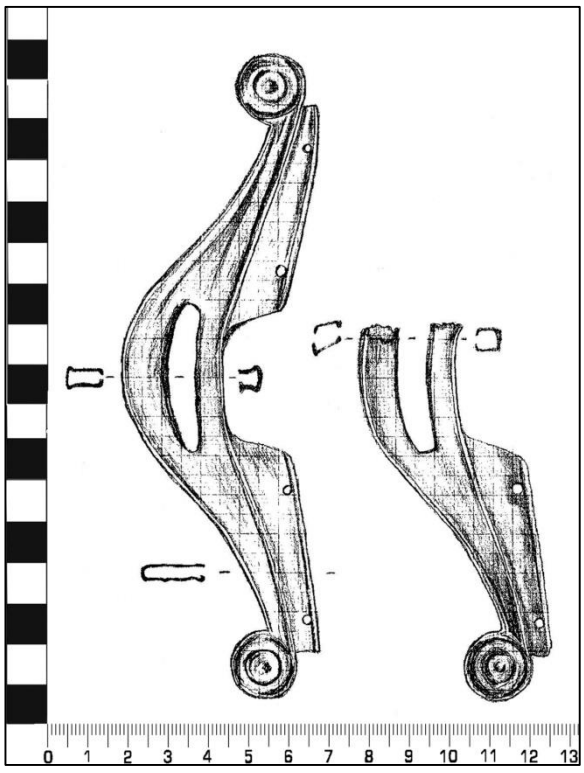


Llyn Fawr (Glamorgan): belt hook (part of Llyn Fawr Hoard, obverse)

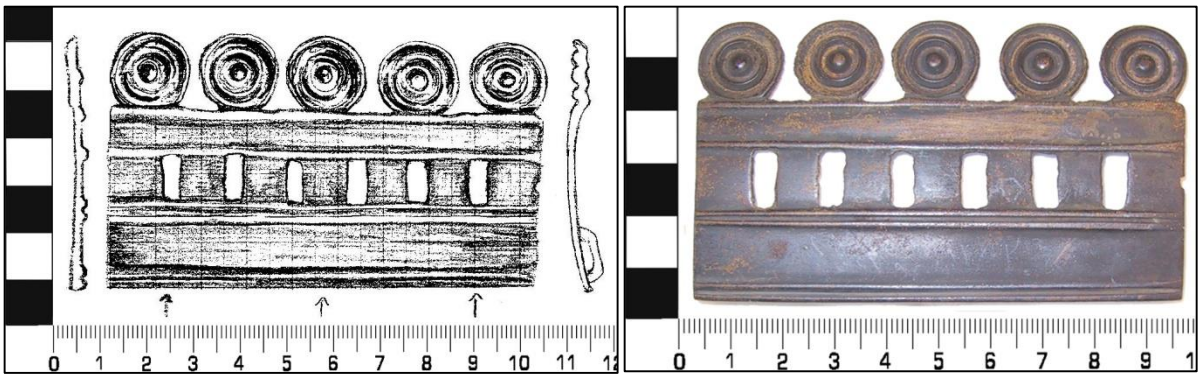
Llyn Fawr (Glamorgan): two bronze and one wrought iron socketed sickle (part of Llyn Fawr Hoard, obverse)

Llyn Fawr (Glamorgan): wrought iron socketed sickle (part of Llyn Fawr Hoard, reverse)

Llyn Fawr (Glamorgan): two bronze socketed sickles (part of Llyn Fawr Hoard)



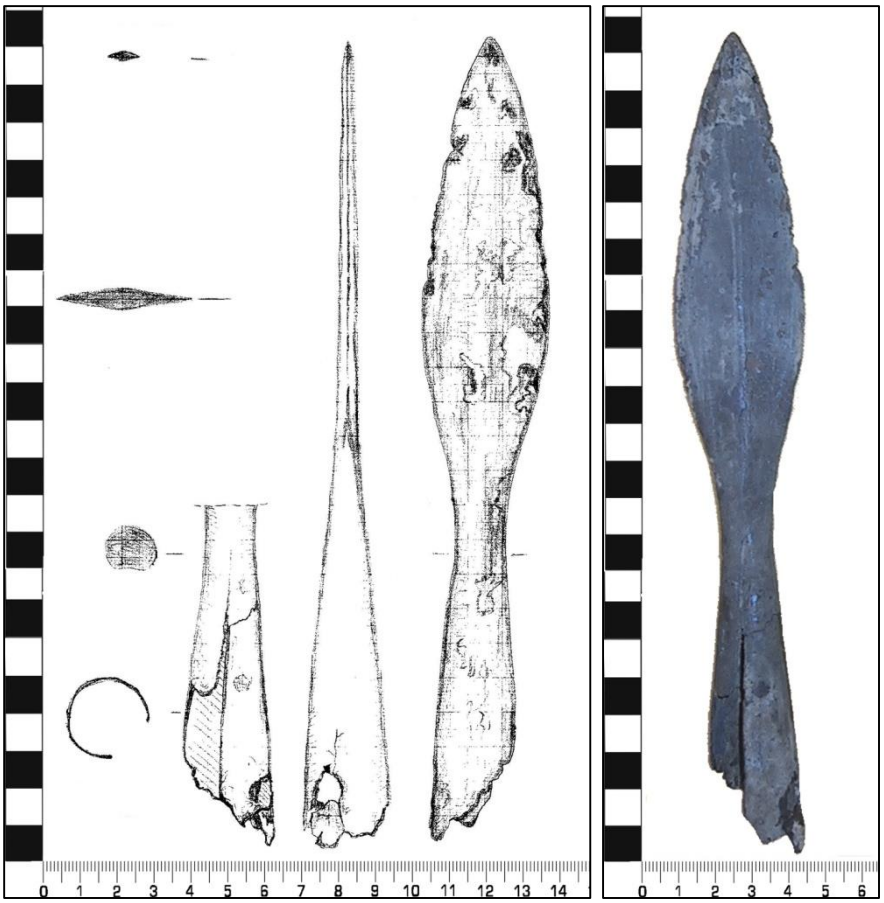
Left, below: Llyn Fawr, Glamorgan: two cheek pieces (part of Llyn Fawr Hoard, obverse)



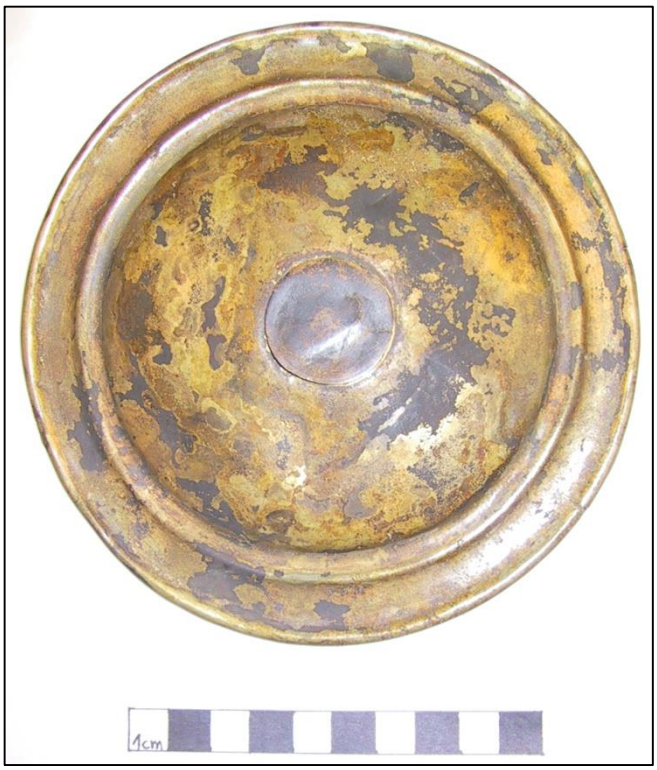
Llyn Fawr (Glamorgan): bronze yoke mount (part of Llyn Fawr Hoard)

Llyn Fawr (Glamorgan): iron sword with bone handle (obverse)

Llyn Fawr (Glamorgan): iron spearhead (part of Llyn Fawr Hoard, obverse, side view, socket detail (drawing), reverse (photo))

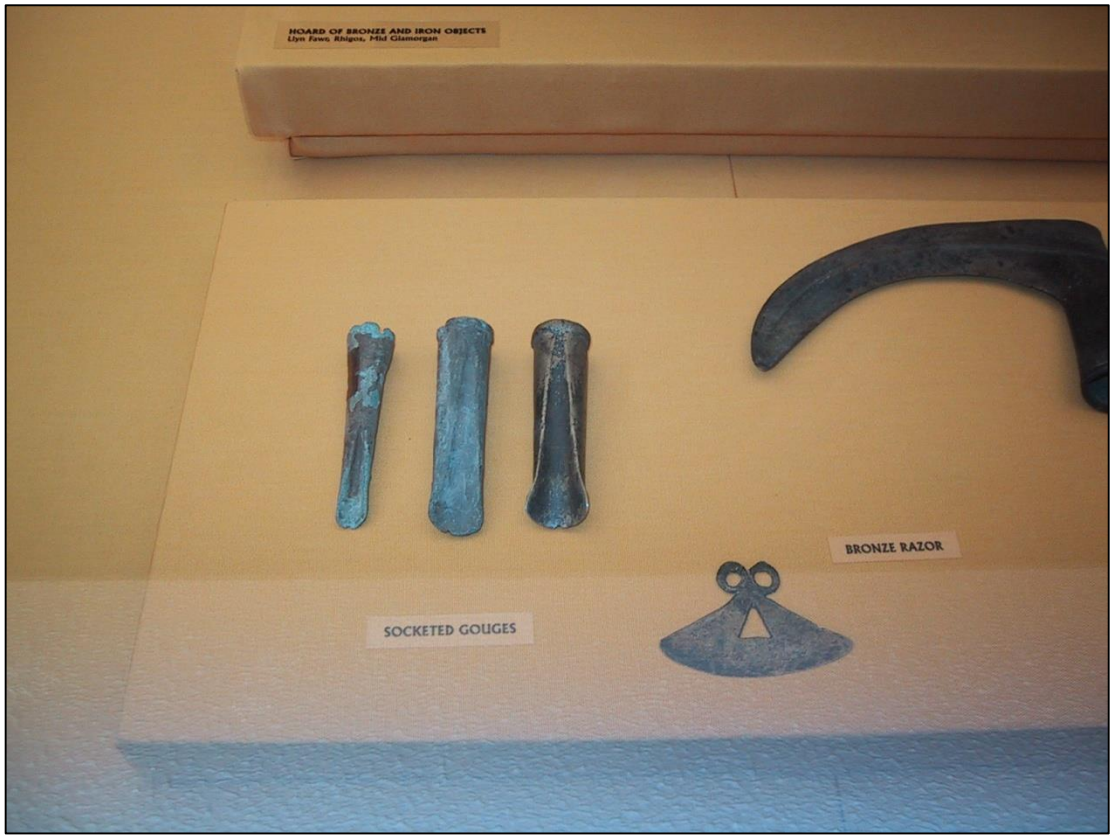


Llyn Fawr (Glamorgan): bronze triangular razor (part of Llyn Fawr Hoard, obverse)



Llyn Fawr (Glamorgan): bronze phalera (part of Llyn Fawr Hoard, obverse)

Llyn Fawr (Glamorgan): two bronze phalerae (part of Llyn Fawr Hoard, obverse)

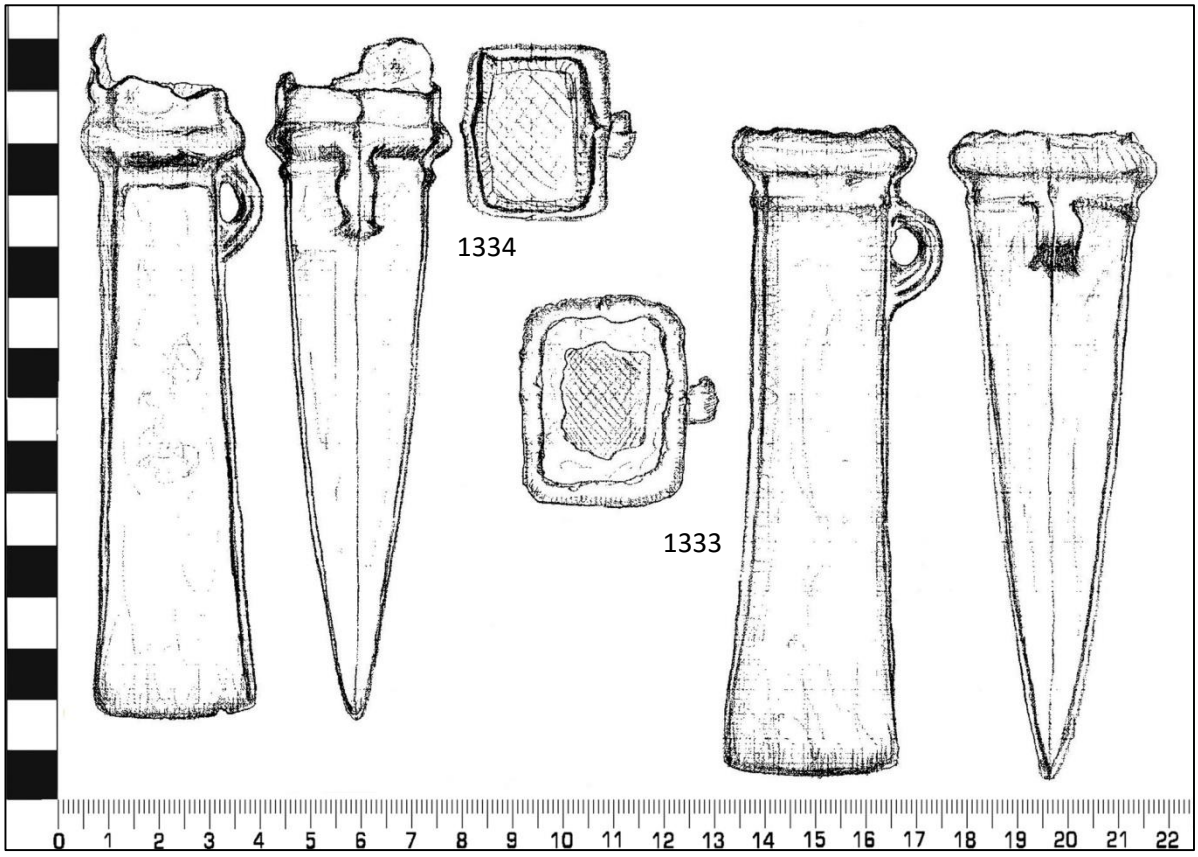


Llyn Fawr (Glamorgan): socketed gouges, triangular razor and socketed sickle (part of Llyn Fawr Hoard)

Llyn Fawr (Glamorgan): one of two bronze cauldrons (part of Llyn Fawr Hoard)

Penllyn Moor (Glamorgan): *iron socketed axe* (no. 1328: obverse, reverse)

Newton Nottage (Glamorgan): *Armorican type* (no. 1331: obverse, view inside socket, side view)

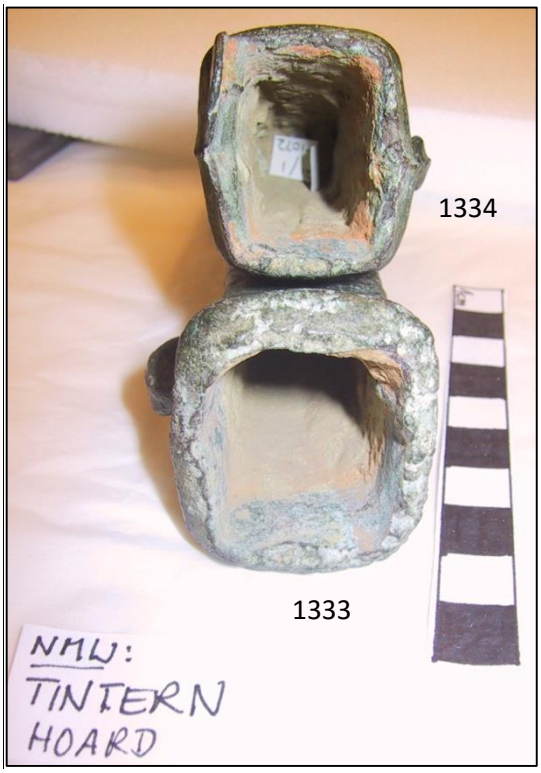


Tintern Hoard (Glamorgan): *Axe hoard, Armorican type* (nos. 1333-1334: obverse, side view, view inside socket)

Tintern (Glamorgan): *Axe hoard, Armorican type* (1333-1334: obverse)

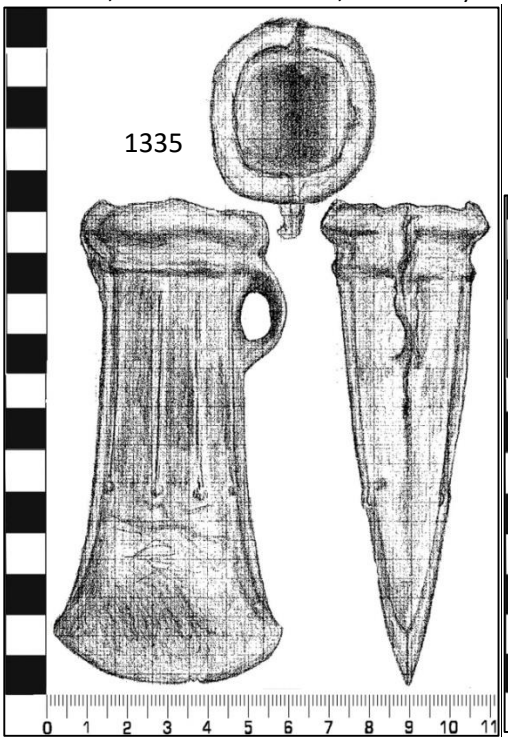
Tintern (Glamorgan): *Axe hoard, Armorican type* (1333-1334: side view)

Tintern Hoard (Glamorgan): *Axe hoard, Armorican type* (nos. 1333-1334: reverse)

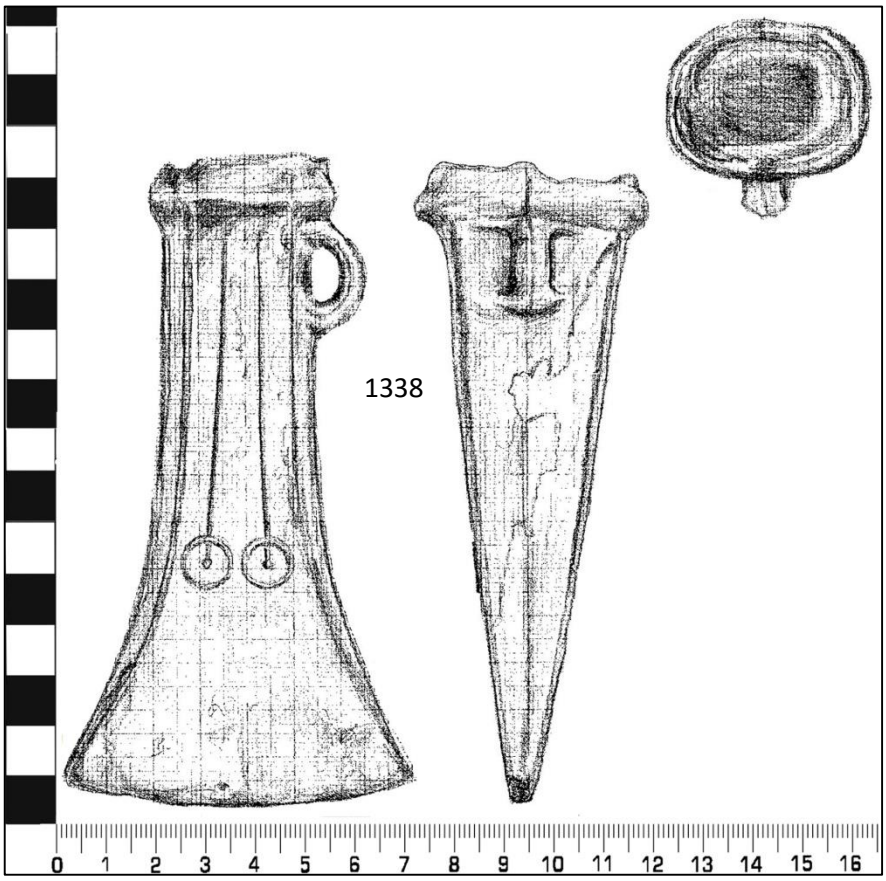


Tintern Hoard (Glamorgan): *Axe Hoard, Armorican type* (nos. 1333-1334: view inside sockets)

Abercarn (Monmouthshire): *Sompting type, Cardiff II variant* (no. 1335: obverse, view inside socket, side view)

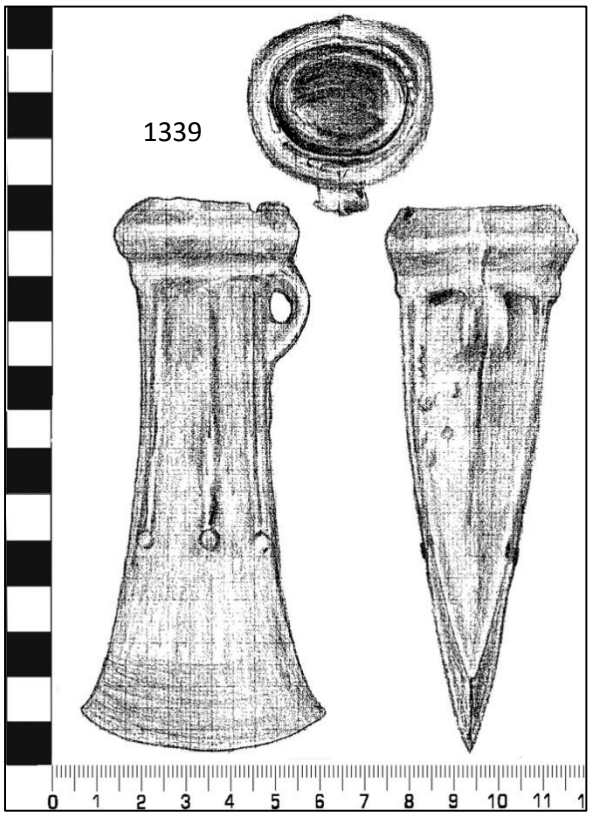


Abercarn (Monmouthshire): *Sompting type, Cardiff II variant* (no. 1335: obverse, side view, reverse)



"Scotland": *Sompting type, Tower Hill variant* (no. 1338: obverse, side view, view inside socket)

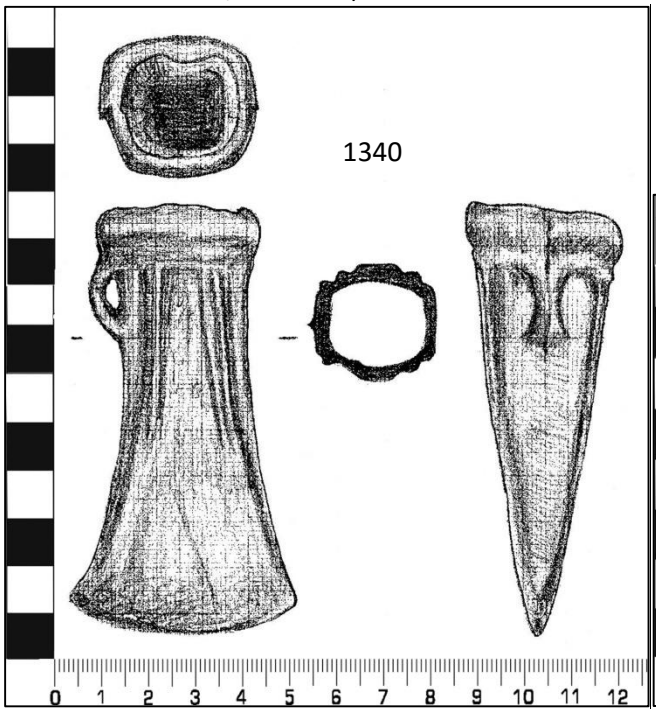
"Scotland": *Sompting type, Tower Hill variant* (no. 1338: obverse, reverse)



"Scotland": *Sompting type, Cardiff II variant* (no. 1339: obverse, view inside socket, side view)

"Scotland": *Sompting type, Cardiff II variant* (no. 1339: obverse, reverse)

"Scotland": *Linear-decorated type* (no. 1340: reverse, view inside socket, side view)



"Scotland": *Linear-decorated type* (no. 1340: obverse, reverse)

Unprovenanced: *Transitional type* (no. 1347: obverse, side view, reverse)

Hindon Hoard (Wiltshire): *Sompting type, Cardiff II variant* (no. 1354: obverse, reverse)

Hindon (Wiltshire): *Hindon type (variant)* (no. 1355: obverse, reverse)

Hindon Hoard (Wiltshire): *Sompting type, Cardiff II variant* (no. 1356: obverse, reverse)

Hindon (Wiltshire): *Sompting type, Tower Hill variant* (no. 1357: part of Hindon Hoard, obverse, reverse)

Hindon (Wiltshire): *Hindon type* (no. 1361: obverse, reverse)

Hindon Hoard (Wiltshire): *Hindon type* (nos. 1358-1360: obverse)

Hindon Hoard (Wiltshire): *Hindon type* (no. 1370: reverse; nos. 1371-1372: obverse)

Hindon (Wiltshire): *Hindon type* (nos. 1362-65: part of Hindon Hoard, reverse)

Hindon (Wiltshire): *Hindon type* (no. 1368: obverse; nos. 1366, 1367+1369: reverse, part of Hindon Hoard)

Hindon (Wiltshire): *Hindon type* (nos. 1373 -1376: part of Hindon Hoard, reverse)

Hindon (Wiltshire): *Hindon type* (nos. 1377, 1379+1380: reverse; no. 1378: obverse)

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Hindon (Wiltshire): *Hindon type* (part of Hindon Hoard: nos. 1381+1384: obverse; nos. 1382+1383: reverse)

Hindon (Wiltshire): *Hindon type* (part of Hindon Hoard: no. 1386: reverse; nos. 1385+1387: obverse)

Vale of Wardour (Wiltshire): *Blandford type* (no. 1388: part of Vale of Wardour Hoard, obverse, side view, reverse)

Vale of Wardour (Wiltshire): *Blandford type* (no. 1389: part of Vale of Wardour Hoard, obverse, side view, reverse)

Vale of Wardour (Wiltshire): *Sompting type, Tower Hill variant* (no. 1390: part of Vale of Wardour Hoard, obverse, side view, reverse)

Vale of Wardour (Wiltshire): *unknown type* (no. 1391: part of Vale of Wardour Hoard, side view, obverse, side view, reverse)

Vale of Wardour (Wiltshire): *Armorican type* (no. 1392: part of Vale of Wardour Hoard, obverse, side view, reverse)

Preston Capes (Northamptonshire): *Sompting type, Kingston variant* (no. 1393: side view, obverse, side view, reverse)

Rookley Farm, Stockbridge (Hampshire): *Sompting type, Figheldean Down variant* (no. 1394: obverse, side view, reverse)

Salisbury (no. 1096, Wiltshire) and Figheldean Down (nos. 1033-1036, Wiltshire): *Sompting type, Figheldean Down variant* (nos. 1033-1036: part of Figheldean Down Hoard, reverse; no. 1096: part of Salisbury Hoard, reverse)

Rookley Farm, Stockbridge (Hampshire): *Sompting type, Figheldean Down variant* (no. 1394: obverse, side view, reverse)

Skelmore Heads (Cumbria): *Sompting type, Kingston variant* (no. 193: part of Skelmore Heads Hoard, obverse, side view, reverse)

Ulverston (Cumbria): *Sompting type, Kingston variant* (no. 1396: part of Ulverston Hoard, obverse, side view, reverse)

Ulverston (Cumbria): *Sompting type, Kingston* variant (no.1395: part of Ulverson Hoard, obverse, side view, reverse)

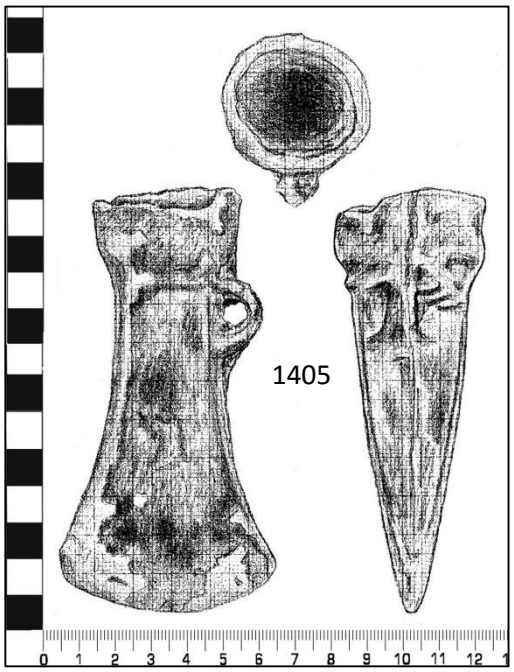
Ulverston (Cumbria): *Sompting type, Tower Hill* variant (no.1397: part of Ulverson Hoard, obverse, side view, reverse)

Traprain Law (Midlothian): *Late Bronze Age socketed axes* (settlement finds, obverse)

Traprain Law (Midlothian): *iron socketed axe* (no. 1404: settlement find, obverse, reverse)

Traprain Law (Midlothian): *iron socketed axe* (no. 1404: settlement find, view inside socket)

Rahoy (Morvern): *iron socketed axe* (no. 1403: settlement find, obverse, reverse)



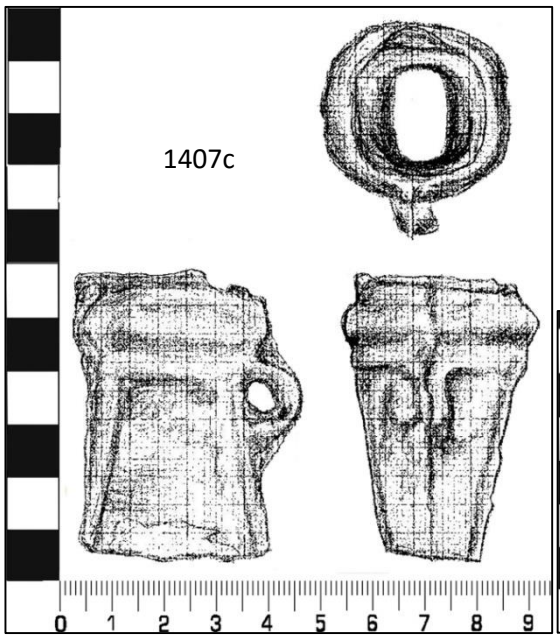
Llanmaes (Glamorgan): *Sompting type, Tower Hill variant* (no. 1405: pyre/feasting/midden site, obverse, view inside socket, side view)

Llanmaes (Glamorgan): *Sompting type, Tower Hill variant* (no. 1405: pyre/feasting/midden site, obverse, side view, reverse)

Llanmaes (Glamorgan): *Armorican type* (no. 1406: pyre/feasting/midden site, obverse, side view, reverse)

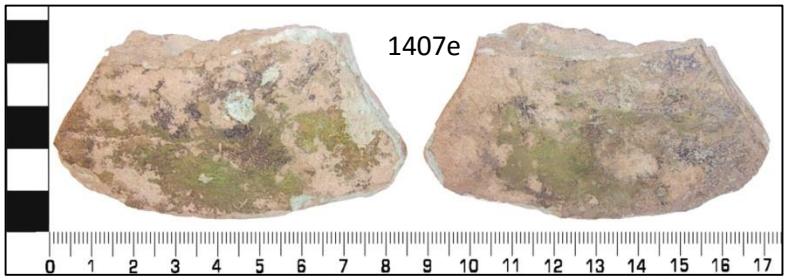
Llanmaes (Glamorgan): *Armorican type* (no. 1407a: pyre/feasting/midden site, obverse, side view, side view)

Llanmaes (Glamorgan): *probably Sompting type, Tower Hill variant* (no. 1407b: pyre/feasting/midden site, obverse, side view, reverse)

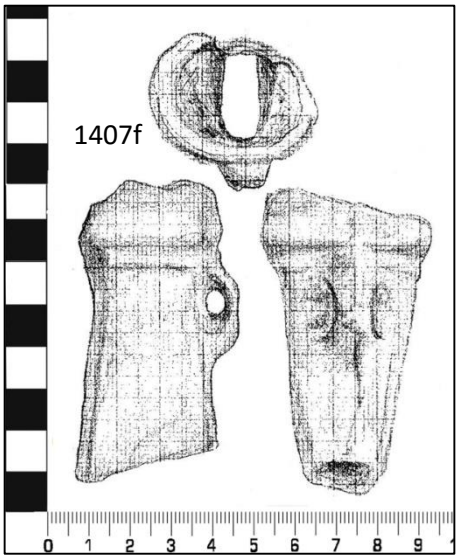


Llanmaes (Glamorgan): *probably Sompting type, Tower Hill variant* (left: no. 1407c, obverse, view inside socket, side view; below: 1407c, obverse, side view, reverse)

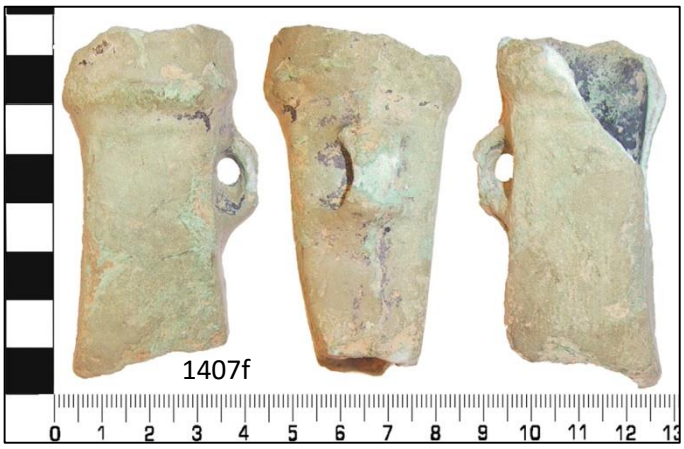
Llanmaes (Glamorgan): *unidentified fragment* no. 1407d: side view)



Llanmaes (Glamorgan): *unidentified fragment* (no. 1407e: pyre/ feasting/settlement site, obverse, reverse)



Llanmaes (Glamorgan): *probably Sompting type, Tower Hill variant* (left: no. 1407f, obverse, view inside socket, side view; below: 1407f, obverse, side view, reverse)



Llanmaes (Glamorgan): *uncertain type* (no. 1407g: pyre/feasting/ settlement site, obverse, side view, reverse)

Vale of Wardour (Wiltshire): nos. 1388-1392; Multi-period hoard

Vale of Wardour (Wiltshire): nos. 1388-1392; Multi-period hoard (close-up of socketed gouges)

Skelmore Heads (Cumbria): no. 195; part of hoard

Skelmore Heads (Cumbria): no. 198; part of hoard (copyright PAS)